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 SUMMARY of Activities

Even in this age of a global pandemic, the MOVE team has been active, all while observing social distancing recommendations.

Volunteers Jay Diepenbrock and Steve Kemp assisted with the Tennessee tornado recovery at the beginning of COVID 19 discovery. This deployment is covered further in this Newsletter.

Training was completed in March for both Red Cross DST 101 and MOVE in Raleigh. Many thanks to the volunteers who provided the training and received the training. Your enthusiasm is contagious!

The truck teams have been working steadily on upgrading procedures, manuals, supplies, etc. remotely. Video conferencing has been used to connect people from around the US. See the article on the truck teams and the exciting work going on there.

Further, electronic meetings with other emergency responders highlighted the need for additional radio equipment to facilitate our communication with others who may be assisting during disaster recovery efforts. Many thanks to the IEEE-USA Board of Directors for granting our request for the additional assistance.

On the International Front, we have been video conferencing with IEEE volunteers in the Caribbean and India to complete our request to expand MOVE beyond the US. It is exciting to see the tremendous human spirit and all who desire to help others in times of need. Wish us luck as we take this forward!

At our first virtual Town Hall on April 6, 2020, there were 160 attendees! We are so grateful for your interest and support of this program and will be bringing virtual meetings and training on a more regular basis this year.

Thank you for your support!

Mary Ellen Randall, FIEEE
Please donate when you can. Every bit helps! move.ieeeusa.org
2020 Nashville Tornado Response

On March 6, Nashville TN was hit by tornados. The MOVE team was deployed to the area on March 14 to support Red Cross Multi-Agency Resource Centers (MARCs) as they provide short-and long-term storm recovery resources to victims of the devastating tornados.

Steve Kemp and Jay Diepenbrock quickly spent the first day helping solve network connectivity problems, setting up printers, and video streaming for news conferences in Nashville, TN. The second day the team traveled to Lebanon, TN to support a Multi-Agency Resource Center (MARC), where clients affected by the tornado can come to register for assistance and get needed supplies.

By March 17, Jay and Steve completed their support of the MARCs and moved back to Disaster Relief Operation (DRO) Headquarters, where they worked with the DST team to clean and pack up technology equipment to be returned as the Red Cross staff out process and go home from the operation.

The team provided Disaster Services Technology support services (technology support, communications/internet access) to help MARCs provide services such as mental health support, WeGo transit passes, preparedness information and disaster health services, financial and insurance assistance, and more.

A MOVE WebEx Townhall was held on April 6, 2020. 160 people signed in for a general status of the MOVE Program. The WebEx recording of this town hall is available on


MOVE virtual activities during COVID social distancing include:
- work on back design of the truck
- radio strategy
- additional relationship building with State Emergency Management, Civil Air Patrol and Search and Rescue

Hurricane Season starts June 1
Meet Steve Kemp

Steve Kemp first became involved in IEEE MOVE at SoutheastCon 2014 in Lexington, Kentucky. Little did he know that in October 2016 he would get ‘one of those calls’ from Mary Ellen Randall and find ‘yes’ coming out of his mouth before his brain engaged in the conversation. Within 2 hours, he had taken a couple of prerequisite Red Cross courses, passed a background check, and was on his way to pick up a rental car that Red Cross had arranged near his home. Between the first call and his departure, the mission changed from meeting the MOVE truck, which was repositioning to follow the storm, to a Red Cross Disaster Services Technology (DST) assignment in Wilmington, NC—if he could get there before the storm hit. He made it just in time to hunker down and sit out the Hurricane, which caused substantial damage, followed by major flooding. Seeing a few people in his hotel wearing Red Cross vests, he joined in and helped put the early planning together as it was too windy to leave the hotel. It was a second day before he could report to the newly established District Office, which had a preliminary set-up before the storm.

Keith Savage, an experienced DST lead and a great mentor, was really helpful when Kemp discovered that his 1-week mobilization was a two-week obligation; but he was learning so much and quickly given sufficient responsibility, that he extended twice for a total of a month on the job.

Every day was a new assignment. The coaching was thorough but gentle, and his mistakes were few and disclosed early enough to draw not much more than a knowing wince from his mentor. Kemp adapted quickly to the new and ever-changing demands, managed to complete much of an online night training DST-101 course in equipment, capabilities and operations and went on to attend a 3-day Hands-on-Training (HOT) in Baltimore the following Spring. There, he worked in a simulated disaster with much of the equipment inventory available for a DST response.

In the Fall of 2017, Kemp was mobilized for Hurricane Harvey in Texas and spent a month in Houston, arriving just in time to relieve Grayson Randall and Tim Forrest, who had just equipped the opening of the Houston Convention Center which overnight became home to 12,000 displaced persons!

A week after getting home, Kemp mobilized again for another month in Houston, then a few weeks later, a month in Puerto Rico, where he joined a team setting up power and satellite voice and data communications for the residents of a different municipality each day, sites that had been darkened and silenced by the hurricanes. Puerto Rico has 78 such municipalities and all were severely damaged by back-to-back Hurricanes Irma and Maria.

It wasn’t until his return from Puerto Rico that Kemp got a ride on the MOVE truck. Everywhere he went, he was an ambassador for the MOVE Initiative and for IEEE, and was warmly welcomed to every assignment.

Steve deployed to the Tennessee Tornadoes in the truck in March 2020. Thank you Steve!
Red Cross Requirement for MOVE Volunteers

There is often confusion about the requirements for MOVE volunteers with respect to American Red Cross and training requirements. To become a MOVE volunteer, you should sign up at https://move.ieeeusa.org/help/volunteer-resources/

Volunteers who want to deploy on non-disaster STEM deployments are only required to take the IEEE MOVE Operations class. This will allow you to deploy on non-disaster deployments, such as STEM or Public visibility events.

If you want to deploy to disaster deployments with MOVE and the Red Cross, you must have the following:
- Red Cross volunteer ID
- Red Cross “DST” GAP
- Red Cross DST 101 classes
- IEEE MOVE Operation class

Obtain the Red Cross volunteer ID by becoming a Red Cross volunteer. https://www.redcross.org/volunteer/become-a-volunteer.html

The Group/Activity/Position (GAP) is a classification on what type of Red Cross work you would like to do. DST is the “Disaster Services Technology” group which delivers technology solutions at disasters. Red Cross has many other GAPs which you are welcome to join, but only DST is required for MOVE. The DST group has a DST 101 class that normally is 7 classes given 1/week by webex. Specific class schedules are available from DST@redcross.org.

American Red Cross is a volunteer organization like IEEE. The Red Cross will engage you to be involved with many Red Cross activities. You are welcome to participate as much as you like but MOVE only requires that you have the above requirements.

As there are many Red Cross offices nationwide, many are not familiar with IEEE MOVE Program. If your local Red Cross office does not know about MOVE, we can provide additional information. Please contact d.sewell@ieee.org for assistance.

The following online FEMA classes are recommended, but not required:  https://training.fema.gov/nims/
- ICS-100
- ICS-200
- ICS-700
- ICS-800

Also, note that IEEE has additional training requirements for drivers. To express an interest in being an IEEE MOVE driver, contact merandall@ieee.org. There are a limited number of drivers and it requires multiple disaster deployments with MOVE before you are eligible.

Thank you for your interest in IEEE MOVE and I hope this helps clarify the requirements to participate.

For more information, contact Grayson Randall, IEEE senior member/MOVE Operations lead g.randall@ieee.org

Puerto Rico MOVE efforts

In an attempt to spread the good impact that IEEE USA initiative, MOVE, has been having in the society for years, Jenifer Castillo (R9) has led the initial processes to work together with the Red Cross, Puerto Rico’s Chapter, and is building up a Community Outreach program that allow the Sections in Puerto Rico, to recreate the impact this program is having in USA.

With the close support of Loderay Bracero, and the Puerto Rico and Caribbean Section chair, Christian Figueroa, Jenifer consolidated a group of eight committed volunteers, that now are Red Cross volunteers as well, part of the DST (Disaster Services Technologies) Team.

The volunteers are currently undergoing the training portion of the process, which has been challenging considering the constrains that comes with COVID-19 global outbreak. But in a joint effort with the Red Cross team, they have been able to go through the different training modules and establish a path to strengthen the DST initiatives in the island and they are able to support the response of the Red Cross in future disasters if needed.

Puerto Rico is frequently hit by hurricanes and other natural disasters, so this is a very worthwhile effort.
Mary Ellen Randall – Recipient of 2020 IEEE Haraden Pratt Award

Haraden Pratt award is one of IEEE top awards, established in 1971 in honor of Haraden Pratt, then Director Emeritus of IEEE, who had given dedicated and distinguished service. This award is given to a senior member for ‘outstanding volunteer service to IEEE.’

Representing the very essence of “volunteerism in action” within IEEE, Mary Ellen Randall leads by example in inspiring IEEE members to advance technology for the benefit of humanity. A long-term volunteer who has served IEEE in many capacities, Randall has been dedicated to increasing member participation and engagement within the Institute through collaborative design, coaching, and leadership.

One of her most well-known initiatives is the IEEE MOVE (mobile outreach vehicle) program. MOVE involves a disaster assistance vehicle and a team of IEEE volunteers who respond to crises throughout the United States. She and a team of volunteers have personally assisted the Red Cross and other organizations by providing power, cell phone charging capabilities, communications, networking, and other services to both disaster victims and relief workers. A prime example of IEEE member engagement in action, the vehicle itself was designed, is maintained, and operated by IEEE members. For more information about her award, visit https://www.nxtbook.com/nxtbooks/ieee/awards_2020/index.php

Volunteering for IEEE MOVE

You want to support IEEE MOVE... but don’t know where to start? This article describes the many skills required to run the IEEE MOVE Community Outreach program. I am sure you can find a spot to contribute.

Disaster Deployments: These are the volunteers that travel to disaster events with the IEEE MOVE truck to provide power and communications support. We normally expect a two-week commitment and the work is physically demanding and mentally grueling. But for those that like this, it is an extremely rewarding effort. Many of our disaster volunteers actually deploy independent from the truck to support the Red Cross at multiple locations. This requires IEEE MOVE training and cross training with the Red Cross disaster services technology group.

STEM Outreach / Public Visibility Deployments: For those who are unable to deploy for two-weeks or do not like the unknowns of entering a disaster, the STEM outreach and public visibility deployments are often a great option. You will deploy with the truck to schools, universities, and public events to talk about IEEE and the technology we use on the truck. We typically address over 50,000 people each year. These deployments are usually 1 to 3 days in duration and scheduled far in advance. The working condition are busy but much easier that a disaster deployment. IEEE MOVE training covers working in the truck and safety around the truck. Red Cross training is not required.

In addition to deploying the truck, we have many, many volunteers that keep the program running. We are continually expanding the program and can use lots of help. There is a MOVE advisory board that manages the program. This include the following committees:

MOVE Operations: This team supports the MOVE truck. There are several work groups that are working on various aspects of the MOVE truck. This includes:

- Truck maintenance including oil changes, inspection, registration, and general upkeep
- Maintenance of the generator
- A radio strategy team looking at supporting partner requirements
- Networking support team to manage the networking aspects of the truck
- Upgrades and new technologies
- Support to maintain and comply with Federal Motor Vehicle laws and regulations

Congratulations to Mary Ellen
Volunteering for IEEE MOVE (Con’t)

MOVE Communications: The communications team is responsible for distributing MOVE information to our volunteers, IEEE members, and to the public. This includes a regular newsletter, volunteer updates, reports to the IEEE board, as well as TV/Radio/media releases. They also support our social media channels.

MOVE Training: MOVE provides training for all MOVE volunteers. This includes the Operations class, a driver training class, Red Cross DST training, and provides support for National Incident Management System (FIMS) training. We are updating our classes to keep up with new technologies and new procedures. If you like to teach, this is a great opportunity.

Volunteer Management: With hundreds of MOVE volunteers, we need to maintain contact information, Red Cross status, training information, special credentials, deployment history, and additional information about our volunteers. This is a big effort and someone with the ability to manage data would be a great asset to the team.

Program Management: The program continues to grow, and we are now looking at programs in India and the Caribbean. We have many other locations that have expressed an interest in a local MOVE programs. These local programs are locally managed and supported by the advisory board. They need consistent legal support, risk management, insurance, branding and other support. If you like managing multiple worldwide programs, this is the place for you.

Partner Relations: MOVE has established relationships with several non-profit organizations and government agencies. People are needed that can work with other organizations and can be the focal point to support communications and sharing.

STEM Outreach: MOVE reaches out to a lot of students every year. We are always looking for ways to be more effective in developing tools to engage the students. If you like working with students, this is a great opportunity.

Fund Raising: The IEEE MOVE Community Outreach program is funded through donations. Donations are the life blood that allows us to operate. If you have fund raising skills, they can be put into practice.

Finance: We must track our donations, deployment expenses, operating expenses, and keep all the funds straight.

At the local level, there are things you can do as well:

We are looking to have additional MOVE trucks. There is a document available that describes the process to create a local MOVE program and to have your own MOVE truck. Talk to your region director to discuss the possibilities.

The MOVE truck can be requested for a local event. There are associated expenses that can be shared, or a local donor may be willing to assist with. You need to schedule well in advance and understand that disaster deployments can preempt local events.

Promote local companies to donate to the MOVE fund. This helps us to operate.

Meet with your local Red Cross to see how you can assist.

Meet with local government to see if there are ways you can assist.

Follow our MOVE Facebook page #ieeeusamove

Follow MOVE on IEEE Collabratec – Community: MOVE Community Outreach Inside Scoop
This is free to IEEE members and nonmembers. https://ieee-collabratec.ieee.org/

If you have a desire to do humanitarian work and IEEE MOVE meets that requirement, then consider volunteering for one of the many positions in the MOVE community. You will find it very rewarding.

MOVE 2019 ASAE “Power of A” Gold
During Engineering week 2020, the MOVE truck was displayed at The Forge Initiative [https://theforgeinitiative.org/] in Cary NC. The Forge is a K-12 STEM non-profit that provides STEM educational programs in a year-round format. Excited people of all ages toured the MOVE truck and were informed on IEEE and the disaster relief program. It was a great opportunity to meet the public and get kids interested in engineering. Jay Diepenbrock and Brian Greene provided the tours for the day.

The MOVE truck was deployed to Jacksonville, FL on an educational mission in early February.

The project started with a visit on Saturday, Feb 8, to the local Red Cross Chapter. About 25 Red Cross volunteers from around the southeast United States toured the truck and learned about its many support functions.

On Sunday, Feb 9, we were at the Northeast Florida Science and Engineering Fair at the Florida Blue Convention Center, while the students were setting up their projects for judging the next day. About 160 students and their parents came by the truck, some stayed for the inside tour.

On Monday, Feb 10, the truck made an appearance at a special seminar on artificial intelligence sponsored by the Jacksonville Chapter of the Computer Society. About 30 attendees toured the truck.

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.” Help today! IEEEfoundation.org/move

For more information, contact merandall@ieee.org

STEM Activity - MOVE continues to support STEM events. Unfortunately, due to COVID-19, STEM events have been limited or canceled. These two events were held early 2020.
IEEE MOVE Truck Working Groups

The IEEE MOVE truck has several working groups that help keep the Disaster Response Vehicle ready for any requests. This includes maintenance, upgrades, general repairs, and support.

Radio Strategy: Jay Diepenbrock leads a group that focuses on radio strategy. We just got approval to purchase 2 new Public Service Radios as recommended by this work group. The work group is also looking for ways to utilize ham radio and other radio-based communications solutions to allow for better communications in disasters where normal communication infrastructure is not functional.

Training: David Sewell leads a group to keep our training up to date. Based on this work group, we will be implementing a new monthly training webinar. We are also going to do the MOVE Operations class online so everyone can have access to the class. Stay tuned for details.

Maintenance Manual: David Wright has a work group that is developing a maintenance manual for the truck. They are documenting the truck and generator maintenance schedules and procedures as well as a list of spare items that need to be carried on the truck. The truck requires a lot of maintenance to keep it constantly ready for deployment.

Networking Strategy: Grayson Randall has a work group to manage the networking in truck. This includes security configurations, procedures, and backup plans for any possible equipment failures.

There are several smaller projects required to keep things up to date. We are updating our ELD (Electronic Logging Device) required by federal mandate to track the drivers' time, new interior layout to improve storage in the truck, and a Red Cross DST binder with all the Red Cross procedures and forms required when we respond to Red Cross requests.

Our latest work group is an IEEE MOVE Weather team. Tim Forrest leads this work group. The weather team will provide detailed weather information to the MOVE truck to recommend safe driving routes and other safety related weather detail while deployed. The safety of the deployed crew and of the truck are top priority and this team will help enhance the safety of all involved.

There are many people required to keep the IEEE MOVE truck always ready to respond and to ensure we can provide critical services when we arrive at a disaster. If you have an interest in any of these teams, please contact Grayson Randall at g.randall@ieee.org.

MOVE Global radio system

In the amateur radio services there is a popular mode called DMR (Digital Mobile Radio). This service includes radio transmitters around the globe that are connected together by way of the internet. This system allows a licensed operator to direct a radio call to a geographical region, (e.g.-the world, continent, country, state, city), an individual radio, or a group of radios. We will be creating a code to address all of the radios in the MOVE system. That means that any of us, anywhere in the world that has internet access (or a DMR repeater nearby) can push a transmit button on an inexpensive handheld radio and instantly speak to all team members that have their radios on, anywhere they may be located.

This radio service has been used to contact disaster victims at several of the MOVE deployments by the MOVE team. If you need assistance, you can put out a call to the geographical area in which you find yourself.

This radio service requires a Technician Class FCC Amateur Radio license. Even non-technical people can pass this test with only a few hours of study. Instructional material is free on the internet, and the tests and license are free. Anyone that would like to participate in these group calls, pursue a license right away. You can contact Butch Shadwell at b.shadwell@ieee.org it you have questions.

MOVE is funded by donations to the MOVE Fund of the Foundation. To help, please visit https://move.ieeeusa.org/help/donate/

To Volunteer, Join the MOVEment!
https://move.ieeeusa.org/help/volunteer-resources/