

MOVE Community Outreach – an IEEE-USA Initiative is an emergency relief program committed to assisting victims of natural disasters with short-term communications, computer, and power solutions. When not deployed for natural disasters, MOVE volunteers conduct community outreach and learning opportunities for students and the general public in the areas of Science, Technology, Engineering, and Math (STEM). They have been as far west as Texas, and as far north as New York to get students excited about STEM.

2017 Deployment & Activities

Red Cross/Natural Disaster Deployments

- May: Missouri Flood Relief
- August: Solar Eclipse Display - Asheville, TN
- August/September: Hurricane Harvey - Houston, TX
- September: Hurricane Irma - Florida



Featured STEM Outreach Activities

- March: Atlanta Science Festival - Atlanta, GA
- April: IEEE SoutheastCon 2017 - Charlotte, NC
- July: 2017 National Scout Jamboree - National Scout Reserve, Glen Jean, WV
- American Red Cross "Sound the Alarm" community smoke alarm installation program

Natural Disaster Statistics

Source: www.fema.gov

Hurricane Harvey Recovery Statistics

Survivors Applied for Assistance: 886,083
Sq. Miles of Land Impacted: 41,500
Counties Affected: 41 of 53
Flood Insurance Claims: 90,000

Hurricane Irma Recovery Statistics

Survivors Recovery Assistance: \$1.5 Billion
Homes Impacted: 208,000
Survivors Assisted at Disaster Recovery Centers: 77,000



Red Cross takes in 10,000 hurricane Harvey survivors at Houston shelter. MOVE volunteers provided all technology support.

**VOLUNTEERS
NEEDED!**
Please visit:
move.ieeeusa.org

DONATE NOW!

IEEE MOVE Team Makes An Impact

It has been a busy hurricane season for the IEEE MOVE team in 2017. After supporting Missouri flooding in May, the team has been deployed continuously since mid-August. Even at this writing in late October, we still have team members deployed in support of the Red Cross operations. We had team members deploy a total of 5750 hours to support the Red Cross for 3 primary disaster operations. The IEEE MOVE truck was deployed for over 5 weeks and traveled over 6000 miles just this fall.

In early August, the MOVE truck was deployed with the Red Cross to North Carolina for the 2017 total solar eclipse. This town of 1800 expected over 100,000 people to arrive and witness the eclipse. Although only an estimated 23,000 people actually arrived, it became almost impossible to complete a call from a cell phone. The Red Cross systems were up and operational throughout the event, utilizing the MOVE Wi-Fi to support their communications needs. IEEE MOVE was later repositioned to the airport to provide emergency communications during the phone outage (both land lines and cell phones). This is a great example of how the IEEE MOVE truck can respond quickly to an emergency.

Within 24 hours of returning from Andrews NC, we had the oil changed in the truck and were headed for Houston Texas to assist with hurricane Harvey. We arrived in an endless downpour that went on for days. Houston got 51 inches of rain in less than 3 days. We slept in the truck and the next day were assigned to the mega shelter at the George R Brown convention center. Little did we know that in the next 48 hours the Red Cross would take in over 10,000 people that required shelter. We assisted the Red Cross with setting up laptops, printers,



Hurricane Harvey Support - Houston, TX

networking equipment, and radio equipment to support communications with Red Cross Headquarters. Because of the massive number of people arriving, the first few days were continuous reconfiguration of equipment and changing requirements. We were able to pass out IEEE power banks to many of the Red Cross volunteers to assist them in keeping their phones available during the event.

When it appeared that hurricane Irma was going to make a direct hit on Florida, the Red Cross agreed to relocate the MOVE truck from Texas to Florida.

As an example of the personal impact our volunteers have, we were able to assist a hurricane Irma survivor in the Florida Keys who had lost everything. MOVE allowed him to call his family to let them know he was alive and well. The extended deployment of the MOVE truck showed how invaluable it can be in assisting in disaster relief, along with all the wonderful IEEE volunteers that make the IEEE MOVE program a great success.

(Written by MOVE Volunteer Grayson Randall)



Atlanta Science Festival

Mobile Outreach Vehicle Specifications

- Environmentally controlled office space for 7 people
- High speed satellite uplink to provide WiFi internet access
- High speed managed network switch for wired networks
- Wireless Access Points for office or field site support
- 10 kW generator
- 900 W solar panel array for recharging on-board batteries
- Ethernet, IP telephone, Videoconferencing
- Recharging capability for 100 simultaneous battery banks
- DirecTV™ link for news, weather, etc.
- Ability to transport equipment between locations