**About MOVE Disaster Relief & Outreach, An IEEE-USA Initiative**

The MOVE program is committed to assisting victims of and responders to natural disasters and is gathering momentum around the globe. Fulfilling essential short-term communications, technology, and power solutions makes MOVE a game changer. Volunteers bring their diverse skills to the team, share their experiences and knowledge, raise awareness and provide STEM engagement to educate the public about the varied aspects of technology with a positive impact on society. They develop new skills while bringing meaningful humanitarian engagement to the community near and far. MOVE provided eclipse safety glasses for many events.

Please visit move.ieee.org to learn more.

**MOVE News Update by Loretta Arellano**

We’re excited to share that MOVE now has a third vehicle - MOVE-3! This smaller, modularly equipped vehicle will facilitate easier movement across the West Coast. With this addition, we were able to relocate MOVE-1 to Dallas/Fort Worth, ensuring our fleet covers the entire US area.

Read about MOVE-3’s development and MOVE-1’s journey to Region 5.

As we gear up for the 2024 Atlantic Hurricane Season, NOAA predicts an exceptionally busy one, with 17-25 named storms, 8-13 hurricanes, and 4-7 major hurricanes (Category 3+). Our team has been diligently preparing, conducting regular maintenance, and upgrading to 5G.

Drivers have undergone one or two of the driver refresh courses to stay updated on the latest upgrades.

Training remains crucial for both current and new MOVE volunteers. Our monthly Tech Talks feature exciting speakers, and we’re planning another operations training course. Stay connected by ensuring you’re on our distribution list for meeting announcements.

Join our team and make a difference! We need drivers, crew members, and individuals to assist with communications, public visibility, STEM, fundraising, training, and more. Sign up at https://bit.ly/MOVE-SIGNUP

The "STEM on the MOVE" initiative recently brought a series of challenge workshops to schools across Atlanta, achieving resounding success. These events were designed to spark a love for science, technology, engineering, and mathematics (STEM) in students and their families through hands-on activities and engaging presentations.

John Robert Lewis Elementary - January 25, 2024: John Robert Lewis Elementary kicked off the series with an enthusiastic turnout. The workshop featured interactive stations where students delved into robotics, coding, and engineering challenges. Parents joined in, creating a collaborative learning environment that extended beyond the classroom.

Lake Windward Elementary - February 13, 2024: Lake Windward Elementary hosted its STEM on the MOVE challenge workshop, drawing in a large crowd eager to explore the world of STEM. Highlights included exploring color theory and engineering a chair for a teddy bear, providing both educational and entertaining experiences for attendees.

Ocee Elementary - February 29, 2024: The series concluded at Ocee Elementary on February 29th with a night filled with thrilling challenges and educational fun. Students engaged in unplugged coding activities, discovered the intersection of math and art, and solved gummy bear riddles. Each challenge allowed families to explore STEM together, fostering a community spirit around education and discovery.

We extend our heartfelt thanks to Kyle Bryan, who led the STEM on the MOVE challenge workshops at IEEE-Atlanta’s Family STEM Nights. Special thanks to everyone who attended and supported these events. Your participation made each night a resounding success and helped promote a brighter future through STEM education.

For those who couldn't attend, stay tuned for future events and opportunities to engage with STEM on the MOVE. Together, we can continue to inspire the next generation of innovators and problem-solvers.

For more information and updates on upcoming events, please contact Melody Richardson at Richardson.Melody@ieee.org.
IEEE MOVE-2 Truck: Bridging Disaster Recovery and STEM Education

By Melody Richardson

The Atlanta Science Festival’s Exploration Expo recently featured IEEE’s MOVE-2 Truck, showcasing its innovative approach beyond disaster recovery. This mobile asset is reshaping STEM education, as demonstrated at the expo. With over 15,000 attendees, MOVE-2 provided more than 500 truck tours, highlighting its use of STEM skills in action.

More than just a vehicle, the MOVE-2 Truck serves as a mobile STEM asset. Primarily designed for disaster recovery and infrastructure support, it now doubles as an interactive platform for hands-on STEM education.

At the Atlanta Science Festival, visitors had the chance to explore the MOVE-2 Truck and see firsthand how STEM skills can be used to help others. They toured the truck’s technology and learned about the practical applications of STEM in disaster response and recovery efforts.

IEEE’s MOVE-2 Truck stands at the intersection of disaster recovery and STEM education, showcasing the practical applications of STEM skills for the benefit of humanity. As it continues to inspire and empower individuals, it paves the way for a future fueled by innovation, resilience, and collaboration in the STEM fields. For more information and updates on upcoming events, please contact Melody Richardson at Richardson.Melody@ieee.org

IEEE Activities with Children Intro

By Frank Giannattasio

The purpose of the IEEE Activities with Children Program is to support IEEE’s continuing contribution and involvement with STEM programs and the furtherance of IEEE volunteers and staff activities related to these programs. It is important to note that all IEEE staff and volunteers who interact with children have a duty of care and must safeguard and promote the safety and welfare of children. This is an absolute responsibility. In order to support proper interactions, we created the Guidelines for Working with Children. The Guidelines provide advice on appropriate and safe behaviors for all IEEE staff and volunteers when working with children.


These IEEE Guidelines for Working with Children were approved and incorporated into IEEE Policies in November 2017. The Guidelines are referenced within the IEEE Civility Policy. We provide an on-line training program, delivered by IEEE’s partner, Praesidium. Individuals can receive an email link with instructions for completing any required on-line training IEEE sponsored events that are open to the general public where children are under the supervision of their parent(s)/guardian(s) or other authorized adults (e.g. school teacher) or events that are not specifically designed for children are not considered Activities with Children. If you have any questions or wish to discuss further, please contact the IEEE Office of Risk and Insurance Management Services at orims@ieee.org with any questions.
My journey into the realm of disaster recovery management began with the development of a complex disaster recovery management software system for a major telecommunications company. This experience exposed me to the intricate nuances between chaos and restoration, deepening my understanding of the complexities inherent in dealing with both natural and man-made disasters. As I navigated through the challenges of disaster response, I gained a profound appreciation for the importance of efficient resource allocation, strategic planning, and swift action in mitigating the impact of such crises.

On top of being a senior manager managing financial, infrastructure, and people resources at my daytime job, my time as the treasurer for both IEEE-USA and my IEEE NorthEastern region, I honed my financial acumen and stewardship skills, overseeing budgets, managing income and expenses, and delving into fundraising initiatives. This role instilled within me a sense of responsibility and accountability in effectively managing organizational resources in a volunteer-driven non-profit organization.

My early exposure to MOVE provided me with a unique perspective on its mission and impact. However, it was the call to volunteer as MOVE treasurer, extended by MOVE mother Mary Ellen Randall, that propelled me to immerse myself in the organization's cause. As a MOVE volunteer, I have made and am thankful for the numerous meaningful connections and friendships along the way. My role as a speaker and advocate has allowed me to introduce MOVE to diverse audiences, sharing its mission and vision with clarity and passion. Being a region director, it seems like a natural thing to be an advocate for MOVE.

Indeed, MOVE, like an elephant, may appear daunting and enigmatic to the uninitiated observer. To those who have seen its evolving transformative power, it is a beacon of hope, resilience, and solidarity to victims of disasters. My analogy of MOVE as a blind man trying to describe the elephant encapsulates the multifaceted nature of the organization, with each individual grasping a different aspect of its essence based on their own expertise and their unique experiences and perspectives.

I hope my example, combined with the examples of 900 MOVE volunteers across the world, serves to inspire others to volunteer, forging a path that squarely is in line with our IEEE’s stated mission of Advancing Technology for Humanity.
**MOVE-2 at the RARSfest Raleigh, NC**

By Tim Forrest, CET, David Wright and Grayson Randall

David Wright and Tim Forrest crewed the MOVE 2 truck for the annual RARSfest in Raleigh, NC on April 5 and 6th. On April 5th the crew prepositioned MOVE 2 in the Jim Graham Building at NC State university [www.rarsfest.org](http://www.rarsfest.org). The Raleigh Amateur Radio Society (RARS [www.rars.org](http://www.rars.org)) holds an annual gathering that is billed as the largest indoor Hamfest on the East Coast. This year it included: 1,619 Paid Attendees, 15 Commercial Dealers, 11 Exhibitors, 11 Amateur Radio Clubs, 7 Maker Clubs, and 248 Flea Market Tables. There were ARRL Division and Section forums, QSL card checking, educational forums, a satellite demo, and SKYWARN SPOTTER training. Better still, 8 volunteer examiners administered 94 examinations to 71 Exam Candidates.

This event provided significant exposure for IEEE and the MOVE Program. We had a large number of visitors to the truck including some subject matter experts that shared experiences and contacts with us. The visitors included an expert on our mast system, the area Civil Air Patrol officer and a nine-year-old who just passed his amateur extra exam, as well as many, many more. RARSFEST also provided the opportunity for our team to purchase RF parts to complete a project on the Truck.

The Move Truck crew included Tim Forrest KO4OJD, David C. Wright W4LMW and Dan Czuhai KF4MOG. Tim Rogers KC1TWR, a local Ham Club member, assisted in transporting our team members to RARSFEST.

**Smoke Alarms Save Lives: MOVE-2 Red Cross “Sound The Alarm”**

By Grayson Randall

On Saturday March 9th, Tim Forrest and Grayson Randall deployed MOVE-2 to the Red Cross “Sound The Alarm” event in Durham NC. It was a cold rainy day but we were available to the Red Cross team and supported many tours of the truck.

Home fires claim seven lives every day, but having working smoke alarms can cut the risk of death by half. That’s why the American Red Cross is rallying volunteers to install free smoke alarms nationwide, as part of our *Sound the Alarm* events. This year we’ll install free smoke alarms, create escape plans and share fire safety information.

[https://www.redcross.org/sound-the-alarm.html](https://www.redcross.org/sound-the-alarm.html)
On Thursday, March 28th, MOVE-1 started the first leg of her journey to being based in the Dallas/Ft Worth, TX area. With Walt Burns and Dennis Peck as crew, they set out from San Diego heading east on Interstate 8 with Arizona on the horizon. The goal for the first travel day was to reach Payson AZ. Traffic was light and the weather was fair except while passing through metro areas where navigating heavy traffic was the biggest challenge. All systems operated in a road-worthy manner thanks to the fine work of the San Diego Maintenance Team. A small amount of re-fresh on the functions of the DMR amateur radio brought the audio level up to exceed the highway noise! MOVE team amateur radio operator check-ins throughout the day and were appreciated.

Driving MOVE-1 on day 2 through the mountains of northern AZ and New Mexico slowed the forward speed as to be expected. The mountain and forest views were enjoyable and raised many discussion topics from the crew about wilderness experiences. While the weather continued fair, patches of snow were passed along the side of the highway. Late-morning found MOVE-1 in Winslow Arizona with an obligatory stop to look for a flat-bed Ford [see photo]. The driving day continued through Albuquerque and ended in Santa Rosa AZ.

The third day on the road concluded the tour of New Mexico and made swift work of the travel through Texas with a lunch stop in Amarillo. The goal for the day was Oklahoma City OK. Arriving in the evening and parking MOVE-1 at the hotel in ready condition for the hand-off to the next crew of drivers, Grayson Randall and Mark Torres. We were greeted by The National Weather Service (NWS) Severe Weather Warnings as the start of tornado season got underway. Leg two of MOVE-1’s tour takes her on to Arkansas for the eclipse!
Leg 2 MOVE-1 Transfer to Dallas/Ft Worth Texas - GreenTech Conference in Springdale Arkansas
By Grayson Randall

MOVE-1, crewed by Mark Torres and Grayson Randall, attended the IEEE GreenTech Conference in Springdale Arkansas on April 4-5, 2024. Gerry Ourada setup and supported the MOVE booth. MOVE was available for tours for the attendees and students. We also had a booth inside with information about MOVE. Region 5 director Matt Francis, Director -elect Christopher Sanderson, and IEEE President Tom Coughlin all spoke highly of the MOVE program and encouraged attendees to tour the truck. We also met several students from the DFW Metroplex that had significant interest in participating in the MOVE program. During the conference, IEEE Region 5 MOVE lead Gerry Ourada was inducted into HKN, the IEEE honor society. Congratulations to Gerry!

On April 6th and 7th, Region 5 had its region meeting. We got to meet many active Region 5 members and enjoyed engaging with everyone.

Now that MOVE-1 is located in the Dallas/Fort Worth (DFW) Metroplex, we need many volunteers from Region 5. Please contact Gerry Ourada or Mark Torres if you have an interest in volunteering with MOVE.

Leg 3 of MOVE-1 to Dallas/ Ft. Worth - Russellville, AR Solar Eclipse and Dallas, TX area colleges
By Grayson Randall and Jay Diepenbrock

On April 6, Jay Diepenbrock flew to Springdale, AR to meet with Grayson Randall to continue to relocate MOVE-1 to Texas. On Sunday April 7, Grayson and Jay traveled with the truck to Arkansas Tech University in Russellville Arkansas to observe the total solar eclipse of the sun on April 8. They stayed in a newly-renovated dormitory on campus that was far better than many of the facilities they’d seen on disaster deployments. The city was prepared for the long-anticipated eclipse, with games, food trucks, and exhibits including a NASA booth downtown. Grayson and Jay met up with old IEEE friend Sonya Dillard and her friend Ebony, both from Huntsville, AL, who were in town for the eclipse. On Monday, April 8 the weather was spectacular, and the view of the eclipse was a real treat. The MOVE organization provided many groups with eclipse viewing glasses for their eclipse viewing events.
Although the temperature dropped and the area drew darker at totality, it was not as dark as Jay and Grayson had expected. They gave a number of tours of the truck to visitors both before and after the event. There was a big crowd in town for the event, and traffic on the main road past the University slowed to a crawl afterwards with all them trying to get out of town. Wal-Mart even sold out of eclipse T-shirts!

Grayson and Jay then moved MOVE-1 to Dallas/Ft Worth, TX where it will be based for what is predicted to be a more than average hurricane season, and visited three Dallas area college campuses to give tours of the truck.

The students and faculty at UT Dallas, Univ. of North Texas, and UT Arlington were impressed with the truck and several students expressed interest in getting involved with the project. Wednesday, April 10 was a cool, rainy day at UT Dallas, which limited the number of students touring the truck somewhat, in spite of a shaved ice truck nearby. There was particular interest in the MOVE truck at the Univ. of North Texas on April 11, largely due to the promotion efforts made by one of the faculty members who is an IEEE member.
UT Arlington was hosting a drone competition on April 13, and the ten teams were busy getting their entries ready for that event. A few students and faculty members visited the truck that day. Jay and Grayson were able to observe the teams as they worked the bugs out of their designs on the football field on practice day on April 12. The teams were required to build both airborne and land drones for the competition, and designs varied a lot between teams.

Photos by Jay Diepenbrock

The strong wind predicted for the day of the competition was expected to present some challenges.

Mary Ellen Randall arrived in Dallas that night in order to accompany Grayson to the inaugural IEEE Life Members Conference the following week. On Saturday, April 13, Jay flew home to MD.

IEEE MOVE-1 was featured at the inaugural Life Members Council in Austin, Texas on April 14 and 15.

Gerry Ourada, Grayson Randall and Mary Ellen Randall participated. Gerry gave a nice presentation on the MOVE program and Life Members toured the truck.

Danny De Liberato, IEEE Foundation, and Life member, Ray Vargas, MOVE Supporter, were among the truck visitors.
Well, Howdy Ya’ll!!!! Gotta get used to this new language. Yep, I’m in Texas as my new home base. As the saying goes, I was not born in Texas, but I got here as soon as I could!!! My new home is at the University of North Texas in Denton, that’s just north of the Dallas Fort Worth (DFW) metroplex. I’m right off of I-35 and only about 30 miles from the DFW airport, so I am easily deployed when the time comes.

I had a very enjoyable drive across the country from San Diego. My driver teams were very nice, feed me lots of good tasting #2 diesel, kept my tires fully inflated, and we even got to do a few public events on the way.

My weather team was also monitoring as I traveled. They kept an eye out making sure that I knew of any major weather events. This time of year is prone to massive thunderstorms across this part of the country.

My first stop was at Payson, Arizona. I did not expect to get a trip through the mountains as we left Phoenix. It was really pretty country, and I enjoyed the twisty, windy turns!!! We were on the way the next morning. We made a quick side trip to Winslow, AZ. That “flat bed Ford” did “turn around to take a look at me”!!!! We headed on east on I-40 where I was able to see a lot of the original US Route 66. It was awesome country. Did you know that the scenery of the Petrified Forest National Park, and Laguna Pueblo was used as the basis of the movie Cars? One of my favorite movies. As we passed along Route 66 I could imagine my friends Doc, ‘Mater, Sally, Luigi and all the rest of the Radiator Springs residents, rolling along the road.
MOVE-1 Journey to Texas continued

Transcribed by Gerry Ourado

As we passed through Albuquerque, I was thinking, oh, it’s up hill time. It is quite a climb over that pass. I think I burned a lot of diesel there. We stopped for the night in Santa Rosa. Nice little town. Lots of Route 66 memorabilia. As we stopped, I was seeing road signs for Amarillo – that 72 ounce steak really sound tasty and I hoped my drivers would take me there. They could try the steak, and I would just watch and show off my MOVE wrap in the parking lot. We left the next morning for Oklahoma City. As we got on the road, I swore I saw a wile e coyote chasing a road runner. There was an anvil on a cliff with a rope attached, and bird seed on the ground. I assume he was hungry as he was awfully skinny.

The next morning as we approached Amarillo, I saw the strangest thing. A bunch of Cadillacs stuck nose first into the ground. It was kind of cool, but made me wonder, why would a human do that to such nice automobiles? Is that going to be my final resting place – weird. We passed through Amarillo, and on to Ok City. In Ok City I picked up my new driver crew, Grayson and Mark. We spent a day here and in Norman, Oklahoma, visiting with IEEE members, with the National Weather Service and with the National Oceanic and Atmospheric Administration. They are key friends when it comes to my disaster response responsibilities. Remember that weather team I told you about, well they were watching me closely. We were under a tornado watch while we were in Norman. What excitement!!

We left the next morning, headed to Springdale, Arkansas. Here we stopped for a few days to show off my capabilities at the IEEE GreenTech Conference, and the IEEE Region 5 Congress. Region 5 is my new home. At this event, I finally got to meet my new “boss”. Gerry is the Region 5 MOVE Coordinator. He will be working with me as I settle into my new home, and build up a team to take care of me.

After these events were over, we moved on to Russellville, Arkansas. Here I met up with members from NASA and Arkansas Tech University. We team up to host a community event watching the great eclipse of April 8th. That was pretty cool. We all had our sun viewing glasses on.

My radio team was watching things very closely during this time, as the Governors of both Arkansas and Texas had declared local emergencies, due to the expected traffic on the roads around the eclipse event.

After the eclipse we rolled on to DFW – my new home. We stayed in DFW for a week, visiting various universities and hosting public viewing events. Wow, I did not know there were this many universities with engineering programs, in the DFW metroplex. I visited the University of Texas Dallas (UTD), the University of North Texas, and the University of Texas Arlington (UTA). I can’t wait to meet the rest of them, SMU, TCU, Tarleton, TAMU, TCC. (pictures) I made some great new friends, and signed up many volunteers to become part of my Texas family.

Journey to Texas
When the DFW week ended, I moved on to Austin, Texas for the IEEE Life Member Conference. The Life Member Conference was very cool. I met a lot of legacy IEEE members. Did you know that IEEE and these legacy members wrote and maintain all the standards for the communications and power equipment that is inside me? I knew that but did not really comprehend it until I met some of these life members, that actually wrote some of these standards.

After the Life Member Conference ended, I returned to DFW for a couple weeks of rest. I parked at the American Red Cross Warehouse. I needed this rest, I was tired. A couple weeks later, my drivers Grayson and Tim, came back and took me to Interop 2024 at Texas A&M University, in College Station, TX. Now, that was a very cool conference. This conference is all about communications during a disaster response – its like they wanted to talk about me!!! I met many new friends and had visitors from FEMA, Texas Task Force 1, American Red Cross, and others.

After Interop was over, my drivers returned me to DFW and parked me at my new home at UNT. My new boss was waiting with my new Texas registration. I am now a TEXAN!!! Wahoo!!! Check out my new license plates, I really like the Disaster Response vehicle designation. I’m thinking I need an update to my MOVE vehicle wrap, I kind of need some Bluebonnets and Longhorns added.

I’m now on station, ready to deploy for any disaster I’m call to. It is hurricane season, so I suspect I will be visiting the Gulf coast later this year.

Explore the IEEE-USA MOVE truck in virtual reality: https://ewh.ieee.org/ieee/move/vr/
Hurricane Preparedness
By Grayson Randall

The 2024 Hurricane season, June 1 – November 30, is expected to be extremely active. With water temperatures at extremely high levels (hurricane fuel) and wind patterns favoring storm development... most hurricane forecasting organizations are expecting a record number of hurricanes. These are only forecasts as there are many factors, but most meteorologists agree we should plan for the worst. What has MOVE done to address this potential threat?

1) We moved our MOVE-1 truck from San Diego California to the Dallas/Fort Worth Metroplex to be closer to the Gulf of Mexico. MOVE-2 still resides in Raleigh NC. This gives us one day access to the Atlantic and Gulf coast states.
2) A 3rd vehicle for San Diego California is in process. Details to follow.
3) We have implemented new LEO satellite equipment and purchased new 5G cellular equipment to support better data rates and connectivity.
4) We completed in-person driver refresh classes for all our drivers to prepare them for the new equipment and to refresh their driving skills.
5) We are working closely with our team in Puerto Rico to ensure they are ready to support disaster operations.

What can you do to prepare?

1) Make sure you have a hurricane plan. Food, water, and electricity may be unavailable for days and travel/assistance severely delayed.... Are you ready? Be Prepared before the storm!!!! Have a plan!!! https://www.redcross.org/content/dam/redcross/get-help/pdfs/hurricane/EN_Hurricane-Safety-Checklist.pdf
2) Follow the directions of emergency management!!! If they tell you to evacuate, Please Evacuate!!! Even if it was a false call the last several times, this one could save your life. If your state or county has evacuation zones, know your zone and evacuation route. Evacuation requests are not done without serious considerations for life safety.
3) Consider volunteering for MOVE. We have many jobs to fill. You can deploy to the disasters, provide STEM Outreach, or we have many jobs that can be done remotely. Contact Mark Torres for details.
Envision Science Academy – STEAM Night

By Grayson Randall

On April 18th, MOVE participated in an event at the Envision Science Academy in North Raleigh, NC. Tim Forrest and Grayson Randall crewed the MOVE-2 truck for this event. Envision Science Academy is a K-8 tuition-free public charter school. They have a STEAM and Project Based Learning approach. The evening event allowed students and parents to tour the MOVE truck and learn about communications at disasters. Tim had a working experiment where he powered a clock from a potato... students loved it!!!

We passed out many of the “STEM On The MOVE” books. There were many other displays and food trucks at the event. It was a great time.

MOVE Community Outreach at SoutheastCon 2024

By Mark Torres

Among the myriad attractions at SoutheastCon 2024, one booth stood out for its dedication to serving others: MOVE Community Outreach. Led by dedicated MOVE volunteers Mark Torres and Tom Clemons, the booth served as a hub for interaction and education, engaging over 800 attendees with its informative program. Discussions at the booth ranged from the technology housed within the trucks to the program’s growth both domestically and abroad, offering valuable insights into the initiative’s impact. The MOVE Community Outreach team’s visit to SoutheastCon 2024 was a remarkable experience that underscored our commitment to bringing cutting-edge technology and humanitarian aid to communities in need. The engagement and enthusiasm we witnessed at the conference highlighted the powerful impact of collaboration and innovation in addressing real-world challenges.

We extend our heartfelt thanks to all the volunteers, participants, and organizers who made this event a success. Together, we are driving forward the mission of MOVE Community Outreach, fostering resilience and preparedness in the face of adversity.

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
IEEE-USA Congressional Visit Day (CVD)

By Mary Ellen Randall

April 10, 2024 was my first opportunity to attend IEEE-USA Congressional Visit Day (CVD) in Washington, DC. This event is sponsored each year by IEEE-USA, providing structure and logistic support for IEEE Volunteers to meet with their representatives. Staff from IEEE-USA arrange and coordinate a number of visits corresponding with Senators and Representatives from each IEEE Volunteer’s home state.

This year each IEEE Volunteer had the chance to discuss funding for Science and Technology, the Chips Act, and the need for high tech workers and associated training for the future.

In addition, this year we also had a chance to discuss the IEEE MOVE program. I gave a MOVE Coin to North Carolina Senator Tom Tillis and also to Representative Deborah Ross. They were happy to know we have such a valuable resource available in our State of North Carolina to assist with disasters and STEM education, which is an excellent program for both emergency assistance and public education.

MOVE-2 Travels to IEEE World Forum on Public Safety Technology

By Mary Ellen Randall, Grayson Randall, Walt Burns and Tim Troske

On May 13th, the MOVE-2 truck, and volunteers Mary Ellen Randall, Grayson Randall, Walt Burns and Tim Troske traveled to the 2024 inaugural IEEE World Forum on Public Safety Technology in Washington, DC.

The forum is a ground-breaking event dedicated to addressing current and future needs in public safety technology. A wide-ranging series of programs over two days explored advancements in existing and emerging technologies, discovered new research, and gained insights into breakthroughs shaping the future of public safety applications. The forum is positioned for public safety agencies, suppliers, practitioners, researchers, industry leaders, and first responders to discuss and exchange ideas on how emerging technologies can help improve public safety. Examples include how personnel can be more effective in their work, support sustained health and wellness, and learn how technology safeguards our communities.

During the forum, Mary Ellen Randall provided a MOVE community outreach presentation during the Women In Engineering (WIE) meeting, and Grayson Randall participated in a panel discussion on situational awareness and emergency response. Walt Burns and Tim Troske provided tours of MOVE-2.
MOVE Trip to Texas A&M / Disaster City

By Grayson Randall

MOVE-1 attended Interop 2024 conference May 6-9, 2024 in College Station Texas. The Texas A&M University ITEC Interoperability Institute is a platform where industry leaders come together to address challenges in first responder communication.

Tim Forrest and Grayson Randall attended 3 days of presentations on first responder communication and tools. This was followed by an impressive one-day exercise involving many local agencies and some new disaster communications technologies. MOVE was able to participate and could track much of the exercise in real-time. We met many peers and discussed our IEEE MOVE program role in disaster communications.

On Friday May 10th, Grayson presented an overview on the IEEE MOVE Program to the faculty and students at Texas A&M followed by a tour of the MOVE-1 truck. There was some discussion on digital twin technology and how that could apply to MOVE. Exciting new technology that is being discussed!
Since we last reported on MOVE-3, the project has experienced some exciting changes and milestones.

**Milestones**

We have a van! In April 2024, after receiving a generous donation from the IEEE-USA Foundation, the MOVE team purchased a van to serve as MOVE-3. The vehicle is in our possession and has been wrapped in MOVE livery like the other two MOVE trucks. See the pictures of MOVE-3 below:

![MOVE-3 Van](image)

**Changes**

The team has decided to homeport MOVE-3 at the Red Cross in San Diego California. At the same time, MOVE-1, which was in San Diego, was moved in April to its new home in Dallas Texas. Having MOVE-1 in Dallas will enable faster response to hurricane disaster relief operations in the Southern and Southeastern United States.

**What Stays the Same**

To meet the MOVE mission and provide enhanced deployment flexibility, MOVE-3 will still use a modular capability to provide internet access, power, and outreach services like the other MOVE trucks, but with lower power generation capability, and in transportable cases. The MOVE equipment will not be permanently installed in the van like the other MOVE trucks, but will be delivered to the relief site, set up, and left to operate on its own with or without the van.

**What is Next?**

The goal is to complete MOVE-3 and have it operational in San Diego by June 2024. To meet this final milestone, we need to complete outfitting the truck with storage shelves, workspaces, supplies, and the modular MOVE equipment units must be completed.
We had two drivers refresh training classes to help our team of drivers catch up on the new technology that we have on the trucks. The team learned about the Starlink terminal and got a brush up course on the Electronic Logging Device (ELD). With the expert assistance of our seasoned drivers and maintenance team members, three very challenging courses were set up and the drivers put the truck through its paces. A heavy emphasis was placed on the proper, safe way to back up the truck.

The first refresher training was on February 23-25 in San Diego, CA and was attended by Walt Burns, Bill Torre, Dennis Peck, Grayson Randall, Mark Torres, Tom Clemons.

The second driver’s refresh training was held on May 17-19 in Raleigh, NC and was attended by Walt Burns, David Sewell, Andy Morrow, Grayson Randall, Alan Brown, Tim Troske, Dennis Peck, and David Wright.

New training material will be developed as each of the MOVE Trucks get built out and their development and capabilities to respond to disaster grows.

The foundational MOVE training is the 3-part Operations training. A class is being scheduled – watch for announcement.

Call for Volunteers
by Loretta Arellano

The MOVE Global program is looking for qualified volunteers who not only have a deep passion for humanitarian work but also the expertise, wisdom and time to commit in support of our program. As we are in an expansion phase of this IEEE-wide initiative, we are primarily seeking candidates for leadership positions of our important committees. We are looking to engage people with developing-world field experience to form and head working groups tasked to pursue the wide variety of the MOVE International global goals.

We’d love to learn about your passions, skills, interests, and volunteer time to explore how we can work together to find a good fit for you in our program.

If interested, please visit https://bit.ly/MOVE-SIGNUP, to complete our MOVE volunteer form.
Global News
By Mary Ellen Randall

MOVE continues to expand in other areas of the world, reaching more and more people with educational offerings and disaster preparation. Details available in this newsletter include:

• India Disaster awareness training for youth.
• India STEM program on climate change.
• India MOVE a thon.
• India MOVE vehicle design is nearly complete.
• Puerto Rico MOVE volunteers have acquired/expanded their amateur radio certifications.
• Puerto Rico development of a collapsible mast prototype that fits in a modular kit.
• Puerto Rico volunteers have joined the MOVE radio club and participated in communications directly with the truck.
• Puerto Rico volunteers also participated in practice sessions with the Red Cross.

If you would like to join these teams, please complete the interest form: https://bit.ly/MOVE-SIGNUP

Further, MOVE volunteers continue to address international conferences as highlighted in other areas of this newsletter.

Thank you for your continued support!
MOVE India News
By Sadhana Attavar

IEEE MOVE (Mobile Outreach using Volunteer Engagement) Global Disaster Relief and Outreach is an emergency response program committed to assisting natural disaster relief workers with short-term communications and power solutions. It is launched in India by IEEE India Council lead by Prof. Debabrata Das, Chair, IEEE India Council and Ms. Sadhana Attavar, Vice Chair, Humanitarian Technology Activities, IEEE India Council.

Plan for MOVE India 2024

Disaster Awareness training Programme: Disaster awareness among the children and youth to promote preventive and curative measure before, during and after disaster events through the active engagement of volunteers, institutions and organisations.

STEM on Climate Change: STEM education related to climate change and sustainability to promote sustainable environment using hands on kits for school students.

MOVE A THON: MOVE A THON an ideathon to Explore more technological innovations to reduce the severity of damage caused by the disaster.

Launch of MOVE India Truck: Technology support through MOVE vehicle for first responders (Organisation or individual) to ensure communication, power, rescue, and information services.
Disaster Awareness Training Program in Karnataka

Disaster awareness training has been initiated in around 9 schools in Mudigere taluk of Chikmagalur district through the IEEE student branch of AIT college. This has been executed in collaboration with ISF (Internet Society Foundation) and IEEE India MOVE Outreach from AIT IEEE student branch in 8 schools and one more by ISF team.

STEM Kits for IEEE MOVE India Program

10 sets of STEM kits on Climate Change and disasters for MOVE India have been developed for use during 2024. The kits were demonstrated on 5th March 2024 at GIEE office BANGALORE. The kit contains everything you need to conduct plenty of experiments. Create and understand micro climates and weather patterns. Discover Greenhouse Gases, Weather vs Climate, Burning Fossil Fuels, rising Sea Levels and play snake and ladder game on climate change.

1. Air Pollution Measurement
2. Green House Effects: Temperature
3. Snake and Ladder
4. Oil Spill Cleanup Game

Students will play snake and ladder games which is about your behaviour and the climate change it draws. Students will climb the ladder; if your behaviour will not harm climate. Snake ladder (the bad house is wrong) and will have bad effect on climate.

Oil Spills are one of the greatest threats to the environment and the flora and fauna of aquatic life. Let us make children to think of ways to clean the oil spills. Students play a game that will help them understand the threats a spill can cause.
MOVE Puerto Rico Prepares for 2024 Hurricane Season

By Loderay I.M. Bracero Marrero, Chair MOVE International Puerto Rico, Collaboratec Profile

The MOVE International Puerto Rico team has offered tech talks about the Modular MOVE. They have continued Red Cross training in steady state, updated their Radio Amateur Licenses, and will conduct testing with the new radio and Starlink equipment. Finally, the team is commemorating the antenna test with Near Vertical Incident Skywave (NVIS), which was held last May with MOVE USA.

Here are some of the Puerto Rico team highlights:

MOVE Puerto Rico Presentations:
On February 27, 2024, Loderay Bracero and Jenifer Castillo (IEEE Region 9 Director) offered a tech talk about the experiences of creating the first Modular MOVE in Puerto Rico. On March 27, MOVE Puerto Rico presented at the MOVE Annual Townhall with other MOVE volunteers and locales from the USA and India.

Tech Talk MOVE Modular presentation https://www.facebook.com/watch/?v=6669784133122104

Radio Communications Team:
Congratulations to Héctor Feliciano and Florencio Sáez for obtaining their Amateur Extra and General licenses, respectively. Created a collapsible mast prototype for the kits; NVIS antennas. It is a small, portable, and easy-to-deploy NVIS mast.

A photo of the collapsable mast prototype.

Continued on the next page.
MOVE Puerto Rico Prepares for 2024 Hurricane Season
By Loderay I.M. Bracero Marrero, Chair MOVE International Puerto Rico

- Supported Digital Mobile Radio (DMR) drop-ins of MOVE Radio Club, such as the MOVE 1 monitoring

Florencio Sáez participating in MOVE 1 monitoring.

- Collaborated with the American Red Cross (ARC) to assess new commercial DMR Handheld radios (UHF) and three repeaters
- Participated in the Caribe Wave 2024 Tsunami exercise by monitoring and giving situation reports on Winlink.
- Created a presentation on Tsunami preparedness
- Organized the logistics for the planned exercise (June 1 to June 8\textsuperscript{th}) using the Xiegu G90 radios and the Starlink.

Red Cross Team

- Participated in training to deploy an on-site Hughes Net Satellite internet receiver with the Red Cross

Team members Francisco Carrero and Héctor Feliciano with the Red Cross at the Hughes Net Testing.

Continued on the next page.
MOVE Puerto Rico Prepares for 2024 Hurricane Season

By Loderay I.M. Bracer Marrero, Chair MOVE International Puerto Rico

- Created communication strategy for deployments between the ARC Puerto Rico chapter and MOVE Puerto Rico
- Continued updating standard procedures for MOVE Puerto Rico deployments
- Created deployment availability and response for flooding events in Puerto Rico (April-May 2024)
- Participated in DST National Tech Talks Training Series

MOVE Modular Kits

- A complete inventory was conducted, adding new kit items (Starlink, pelican cases for the radio, and more).

Our team continues to do excellent work in different work areas. Thank you for all you do!

Sign up to volunteer in MOVE Puerto Rico here.

Website: https://move.ieee.org/puerto-rico/

Contact us at: move-puertorico@ieee.org