

LOCATE, MAP, TRACK, GPS-DENIED.

# TRX SYSTEMS NEWSLETTER

FEBRUARY 2020



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2019 has come and gone, but the 2nd half of the year was a time of continued growth and success for TRX Systems. We unveiled a smart wayfinding and navigation application to improve access and mobility for people with disabilities. TRX was awarded contracts by both the U.S. Army and the Department of Transportation and forged two new strategic partnerships with leading technology companies. We supported a Department of Homeland Security exercise along with other key demonstrations and events across the world including France and Vancouver. We will soon be exhibiting at IWCE. Visit TRX in booth #622!

Please <u>contact us</u> for more information and sign up for our <u>blog</u> to stay current with TRX news and updates. Thank you for your interest in TRX Systems and our GPS-denied location and mapping technologies.









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### TRX IN THE FIELD

# TRX Provides Mission-Critical 3D Location for First Responders During DHS Shaken Fury OpEx

TRX Systems delivered mission-critical 3D personnel tracking and location data in support of the Department of Homeland Security S&T Directorate's Next Generation First Responder (DHS S&T NGFR) - Birmingham Shaken Fury OpEx. From August 19th-23rd, the OpEx demonstrated the ability of NEON® Personnel Tracker and other integrated technologies to enhance first responders' mission capabilities and improve response time in search and rescue, mass casualty treatment, and HAZMAT containment during a simulated earthquake scenario in Birmingham, Alabama.



TRX Systems was selected by DHS to deliver NEON Personnel Tracker, a 3D mapping and location solution that improves operational efficiency, command effectiveness, and safety for industrial, security, public safety, and defense applications. At the Shaken Fury OpEx, NEON® provided seamless personnel location as well as geolocation of other body-worn sensors, including explosive gas detectors and biometric data. The full press release on the exercise can be found <a href="here">here</a>.

For large scale
incident response
like this
earthquake,
deploying our
resources is made
so much easier by
having this 3D
mapping and
personnel tracking
technology,

Cory Moon
Battalion Chief
Shaken Fury OpEx
Incident Commander





TRX partnered with SensorUp to provide seamless GPS-denied location for firefighters and first responders at an all-day live demonstration which dramatically improved their health and safety. Under the direction of Deputy Chief Tyler Moore, the VIP software demo included 60 first responders from Vancouver Fire Rescue Services and Metro Vancouver Regional Fire Rescue Departments.

sensorup

SensorUp technology was used to aggregate and coordinate a real fire, demonstrating the future of connected first responders by providing real-time indoor location tracking, biometrics and chemical detection, providing advanced situational awareness. A short video recapping the live demo can be found here.

#### Partnering with PT Defence at Milipol - France

TRX Systems supported our new European partner Precision Technic Defense at Milipol Paris with the showcasing of NEON Personnel Tracker. Hosting over 1,100 exhibitors and visitors from over 150+ countries, Milipol Paris is one of the world's leading events for homeland and security. Personnel Tracker was displayed to various homeland security personnel including law enforcement, anti-terrorism, border control, CBRN, transport security, and many others.



#### **Next TRX Event: IWCE April 1st-2nd, 2020**

For the 6th consecutive year, TRX will exhibit our NEON® 3D mapping and location solutions at the 2020 International Wireless Communications Expo. Carol Politi, TRX President and CEO, will also present alongside Orion Labs, Polaris Wireless, and Avaya during the Expo. Ken Rehbehn will moderate the session:



Advances in Location Technologies

# **PARTNERSHIPS**

#### TRX Systems Joins L3Harris Technologies' Mission-Critical Alliance

TRX announced its membership in the L3Harris Technologies <u>Mission Critical Alliance (MCA)</u>, a consortium of public safety technology providers with a common goal of advancing the capabilities, compatibility, and security of mission-critical solutions. Members of L3Harris MCA are leading technology vendors offering products and services that complement the <u>L3Harris</u> core network and radio platforms. Alliance members explore technology synergies, furthering the development of mission-critical solutions that meet the needs of federal, state, and local public safety personnel.

With the NEON® API, mission-critical location data can be shared across the MCA ecosystem for visualization of first responder locations indoors and out, including elevation (z-axis) which is vital for real-time operational effectiveness.



#### SAF and TRX Partner to Streamline In-Building Public Safety Signal Mapping

SAF Tehnika and TRX Systems announced the integration of our NEON® Signal Mapper application with SAF's hand-held spectrum analyzer series (Spectrum Compact). The new SAF-TRX integrated solution uses NEON Signal Mapper to deliver real-time geo-referenced signal data that can be visualized both locally by the user and remotely on a 3D display. This new in-building signal testing solution leverages the Spectrum Compact's exceptional measurement accuracy and industry-leading noise floor (-128dB) to provide a complete picture of the RF environment. A short video of the SAF-TRX Signal Mapper solution can be viewed below:



For public safety agencies with resource and budget constraints, the SAF-TRX Signal Mapper solution is the go-to solution. Public Safety agencies or certification service companies new to real-world RF testing now have the tools to quickly get up to speed verifying in-building signal coverage. The full press release on the partnership can be found here.



#### TRX Systems Selected for U.S. Army xTechSearch Phase IV

TRX Systems was selected as a U.S. Army xTechSearch 3.0 Phase IV finalist by the Assistant Secretary of the Army for Acquisition, Logistics and Technology. TRX's NEON® GPS-denied dismount PNT solution was one of 12 finalists selected from over 125 new technologies that were evaluated by the Army. Each of the winning solutions was awarded a \$120,000 prize at the 2019 AUSA Annual Meeting and Expo at the Walter E. Washington Convention Center in Washington, D.C.



The <u>xTechSearch</u> program evaluates innovative technologies needed by the Army and awards prizes to select small businesses that demonstrate proof-of-concept of their dual-use technologies pertaining to Army challenges. As an AUSA awardee in the xTechSearch 3.0 competition, TRX advanced to Stage IV - the final stage - where finalists will demonstrate their technology innovations through proof-of-concept testing for a panel of Army subject matter experts at the 2020 AUSA Global Force Symposium Exposition in Huntsville, Alabama, March 17th-18th, 2020.

# TRX Systems Selected by U.S. Department of Transportation to Provide GPS-Denied Location Technology

TRX was awarded a <u>contract</u> from the U.S. Department of Transportation (DOT) to demonstrate TRX's NEON Personnel Tracker application in an assessment of mature technologies that are available for backup Position, Navigation, and Timing (PNT) services in the event of a disruption to GPS. DOT awarded a total of more than \$2.5 million to 11 companies that are capable of providing backup PNT solutions for

critical infrastructure if GPS is temporarily unavailable. Supported by DOT's <u>Volpe National Transportation Center</u>, NEON Personnel Tracker will be used to provide location of personnel operating in GPS-denied environments in support of a broad number of use cases during the technology demonstrations planned for March 2020. For more information, read the full RFI on the U.S. Department of Transportation contract <u>here</u>.



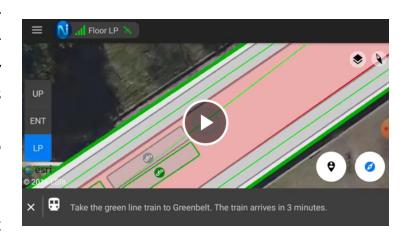


## **PRODUCT NEWS**

# TRX Showcases Smart Wayfinding and Navigation at the DOT Access and Mobility for All Summit

TRX Systems showcased an all new Smart Wayfinding and Navigation (SWaN) service at the U.S. Department of Transportation (DOT) <u>Access and Mobility for All Summit</u> in Washington, D.C. The Summit raised awareness about the DOT and government-wide efforts to improve access and mobility for people with disabilities. Today's transit structures offer basic maps and limited assistive routing information and lack tools to assist with routing for those that might have specific accessibility needs.

TRX developed the NEON® SWaN service to deliver path planning and routing capabilities application developers. The project, supported by Accessible the Transportation Technologies Research Initiative (ATTRI) program, developed mobile location and routing services required to create applications that provide travelers with location. real-time en-route assistance situational awareness, including within complex urban transport structures.



NEON SWaN will enable application developers to better support safe independent travel for people with a diverse set of abilities. Services of SWaN includes:

- Real-time location for the end user device within complex urban and transit structures
- A routing service that delivers routing based on the accessible criteria requested by the end user application
- A mapping service that maintains and delivers map data to create connected route graphs

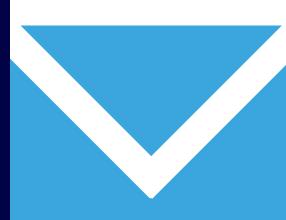


# OUR COMPANY HISTORY

TRX got its start in the public safety market, responding to the demand to safeguard public safety personnel when operating indoors. TRX now delivers the NEON solution for industrial applications (precise signal and sensor mapping), public safety applications (situational awareness, safety, accountability of personnel), and defense applications (assured position within intentionally-denied, indoor, and subterranean environments). TRX provides a tool set and architecture that facilitates delivery of reliable and real-time 3D location and map information that is based on patented mapping and tracking methods.

TRX Systems is the recipient of the Silver Edison Award for Innovation in the Navigation and Robotics category, the Tibbetts Award given by the U.S. Small Business Administration for Innovation and Economic Impact of Research and Development, the TEDCO ICE Award for Corporate Excellence, and the Innovator Award from the Chesapeake Regional Tech Counsel (CRTC). TRX's mission-critical location software development has been supported by the National Science Foundation, the Defense Advanced Research Projects Agency (DARPA), the U.S. Army, and the Department of Homeland Security.





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