



LOCATE, MAP, TRACK, INDOORS.

## TRX SYSTEMS **NEWSLETTER**

**JULY 2019** 

The first half of 2019 has been a time of exciting growth, development, and outreach for TRX Systems. We unveiled an offline version for our industry leading NEON® Personnel Tracker Solution and added new features that are used today by military and homeland security organizations worldwide. The company forged two new strategic partnerships with leading technology companies and supported Department of Homeland Security exercises. TRX also participated in a number of key industry events, including the International Wireless Communications Expo (IWCE), Special Operations Forces Industry Conference (SOFIC), and the NBA Security Conference, and will soon be exhibiting at APCO. Visit us in booth #755!

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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## **PRODUCT NEWS**

## TRX Releases an Enhanced GPS-Denied Solution Suite Supporting ATAK

TRX Systems got off to a great start in 2019 with the release of an all new offline version of its Personnel Tracker Solution compatible with the Android Team Awareness Kit (ATAK) and other secure mobile applications. The new NEON® Personnel Tracker Offline Solution is deployed with an Android APK and NEON Tracking Unit that operates offline, without an internet or cloud connection. The NEON Android API supports integration with third-party applications, delivering safety and situational awareness for warfighters and security personnel operating over secure networks.

ATAK is a U.S. government off-the-shelf geospatial situational awareness application for Android devices used by warfighters and security personnel. The new offline NEON solution is seamlessly integrated with ATAK via a software "plug-in" that delivers location when dismounted personnel are operating both outdoors with GPS and in GPS-denied areas, including urban and subterranean environments. The NEON-ATAK plug-in allows NEON to:

Deliver 2D/3D personnel location everywhere

- Operate with any ATAK compatible Android End User Device (EUD) or network
- Display NEON location data on the Android EUD and within WinTAK
- Deploy ad-hoc Ultrawideband (UWB) "Drop Beacons" to enhance team location accuracy
- Utilize map data and other location constraints when available

NEON's new offline capability for secure warfighter and security applications was based upon extensive end user feedback and field testing; it dramatically simplifies the ability of TRX partners and end users to deliver 3D situational awareness for field personnel operating in GPS-denied areas,

Jeff Kunst, VP Product & Business Development





#### **Assured Dismount Navigation**

NEON detects erroneous GPS (such as that due to jamming and spoofing) and will provide an indication of disruption events via ATAK or through the NEON API. The approach includes integrity monitoring using inertial sensor fusion to deliver assurance and can be optionally integrated with third-party GNSS Assurance software.



TRX released NEON® 11, the newest version of TRX's industry-leading 3D location and mapping solution. NEON 11 delivers a whole new user interface for our NEON applications greatly improving the user experience. The new navigation drawer can be opened by clicking the icon in the top left of the screen or by swiping from the left edge of the screen. More information about the new user interface can be found at our Documentation Website.



## TRX Updates NEON Signal Mapper with New Tool Set and Features

Along with the major release of NEON 11, TRX has added several new features to NEON® Signal Mapper. The new capabilities listed below were intended to greatly enhance functionality and ease for users:

#### Outdoor Heatmaps Feature

Users are now able to generate a heatmap outside, which will simplify the task of collecting, mapping, and analyzing the performance of wireless networks outside.



#### Path Adjuster Tool

Users can now edit the path points in a Signal Map in order to better align the path points with the floor plan layout, creating a more accurate signal map path and report even where floor plans might not be to scale.



More information about these new tools and features can be found at our all new Documentation Website.





## TRX IN THE FIELD

## **Active Violence Response Training at George Mason University**

TRX's NEON Personnel Tracker Solution provided 3D tracking of law enforcement and first responders during a live training exercise at George Mason University's EagleBank Arena in Fairfax, VA. The training was hosted by the SCITI Labs in a collaboration that included the Center for Innovative Technology (CIT) and the Department of Homeland Security's Science & Technology Directorate (S&T). The <a href="DHS S&T's SCITI">DHS S&T's SCITI</a> Labs initiative leverages cutting-edge Smart City and IoT technologies to deliver new capabilities to DHS components and to enhance public safety in communities across the country.



While first responders routinely train to prepare for such emergencies, the GMU exercise presented a unique opportunity for first responders to supplement their training with NEON Personnel Tracker and other innovative technology designed to improve response efforts by enhancing communication, interoperability, threat detection, and situational awareness. The full press release on the exercise can be found here.

"

The location tracking technology provided a clear enhancement to the overall situational awareness of the first responders remote-stationed command staff,

Dr. Julie Zobel VP Safety, Emergency & Enterprise Risk Management





#### TRX Named in *Washingtonian* 50 Great Places to Work

TRX received a great honor in being named one of the <u>50 Great Places</u> to Work in the Washington, D.C. area by *Washingtonian* magazine. TRX was selected after editors reviewed nearly 200 companies and more than 7,500 employee surveys in the Greater Washington D.C area. TRX and the other selected companies appear in the May issue of the magazine.

This year's 50 winning workplaces were chosen on the basis of such measures as interesting and meaningful work, generous pay and benefits, great work/life balance, opportunities to learn and grow, commitment to charity and community, and the recognition and respect given to employees. Among Washingtonian's 50 winning workplaces, there are a mix of sizes with companies ranging from 11 to 8,000 employees.



## TRX Providing 3D Location at Upcoming DHS OpEx in Birmingham, Alabama

Later this summer, TRX's NEON Personnel Tracker Solution will provide seamless indoor and outdoor personnel location in the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) hosted Next Generation First Responder (NGFR) – <u>Birmingham Shaken Fury Operational Experimentation (OpEx)</u> from August 19th-23rd in Birmingham, Alabama.



As hosts of the World Games 2021, a major international multi-sport competition, Birmingham is looking to augment their public safety capabilities. The NGFR – Birmingham Shaken Fury OpEx will help assess how advanced, integrated technologies can help better prepare responders and emergency managers for planned events, like the World Games, and no-notice events, like natural disasters.

## **PARTNERSHIPS**

#### **TRX Partners with Precision Technic Defence**

TRX Systems and Precision Technic Defence, a provider of market-leading capabilities and interoperable systems to both military and national security agencies, announced a distribution partnership that enables Precision Technic Defence to represent and distribute NEON Personnel Tracker to various European countries.

With over 30 years in business, Precision Technic Defence offers industry-leading products and complete turnkey solutions. Their deep understanding of the mission profiles and operational challenges ensure that they configure complete solutions matching the demands within C4ISR, Sensor/Platform and warrior systems.



## TRX Partners with Intrepid Networks to Deliver Enhanced Situational Awareness for Mission Critical Operations

TRX Systems and Intrepid Networks announced a partnership that leverages TRX's mission-critical, 3D GPS-denied location service with Intrepid Networks' Response platform to provide enhanced situational awareness. The TRX-Intrepid technology integration delivers a new solution that provides real-time location data for seamless personnel tracking and geo-location both indoors and out. The integration of NEON's 3D location data will enhance the powerful <a href="Intrepid Response">Intrepid Response</a> platform by extending tracking and geo-referencing capabilities indoors, underground and in

other areas without GPS.

Intrepid Networks provides critical operational support to both government and commercial organizations so that team members can instantaneously communicate, collaborate, and coordinate their operations. During incidents, first responders need to understand the scene quickly and the Intrepid Response platform is a situational awareness solution that provides real-time geospatial data on a feature-rich map, emergency notifications, and rapid information and multimedia sharing for resource management, team collaboration, and incident management.



## **2019 EVENTS**

#### International Wireless Communications Expo: March 6th - 7th

For the 5th consecutive year, TRX presented and exhibited at the 2019 International Wireless Communications Expo. At the show, TRX and our partner Anritsu showcased the <u>industry's first field solution</u> that provides 3D indoor and outdoor coverage mapping for 5G New Radio (5G NR). Carol Politi, TRX President and CEO, and Jeff Kunst, TRX VP of Product and Business Development, also presented at two different sessions:



- Impact of Enhanced Location Accuracy on Public Safety and 911 Services
- <u>How Broadband Enables Enhanced Smart Maps for In-Building and Underground Awareness</u>

#### Special Operations Force Industry Conference: May 20th - 23rd

TRX also exhibited for the third consecutive year at the Special Operations Forces Industry Conference (SOFIC) with our partner <u>Federal Resources</u> in Tampa, Florida. After previously releasing NEON Personnel Tracker Offline Solution, SOFIC was the perfect fit since it was the premier conference for the SOF community to interact with industry and to collaborate on the challenges, initiatives, and way-ahead in delivering the most cutting-edge capabilities to SOF operators.



#### **NBA Security Conference: June 27th - 28th**

TRX made its first appearance at the NBA Security Conference in Las Vegas, Nevada. It was a great opportunity to showcase our NEON apps to the various NBA arena stakeholders and representatives from each franchise. High profile events at large venues such as sporting events, large trade shows, and conventions are possible targets for terrorists and other criminal attacks. NEON's ability to provide 3D location awareness between the broadly deployed federal, state and local police, fire and EMS personnel dramatically improves operational efficiency and improves overall safety of public safety personnel and the tens of thousands attending these events.



#### Next TRX Event: APCO International: August 11th - 14th

The TRX team will be at APCO International's Annual Conference & Expo in Baltimore, Maryland August 11th-14th. You can find the TRX Systems exhibit located at the Baltimore Convention Center booth #755. TRX is looking forward to showcasing its patented NEON Location Services to 5,600+ attendees and other exhibitors at the Baltimore Convention Center. Requests for meetings and demonstrations can be made by contacting us at info@trxsystems.com.



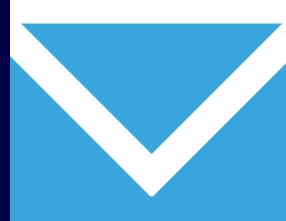
TRX Booth: 755

# 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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