

## CLOSING PERFORMANCE GAPS

The [National Urban Security Technology Laboratory \(NUSTL\)](#) is a federal laboratory organized within the Department of Homeland Security (DHS) Science and Technology Directorate (S&T). NUSTL provides first responders with the necessary services, products, and tools to help prevent, protect against, and respond to homeland security threats.

DHS S&T works closely with the nation's emergency response community to identify and prioritize mission capability gaps and to facilitate the rapid development of critical solutions to address responders' everyday technology needs. As this rapid development nears completion, NUSTL conducts an Operational Field Assessment (OFA) to test the capability and suitability of a prototype technology, to verify and document that development goals were met, and to identify opportunities for improvement prior to commercialization.

## DHS-FUNDED PROTOTYPES

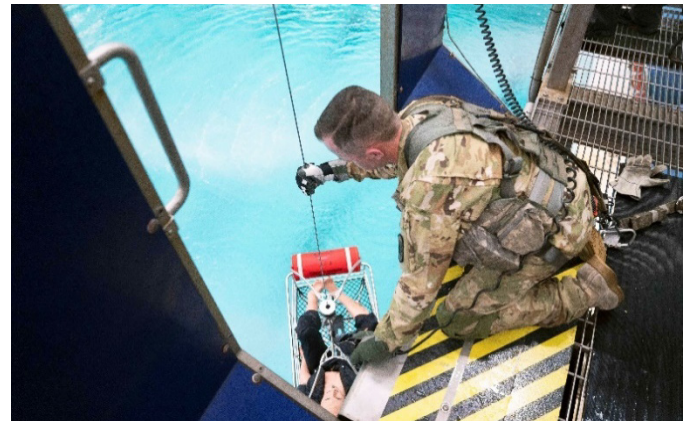
Each year, NUSTL plans and executes OFAs to ensure emerging technologies being developed are assessed through operational scenarios that best simulate the environment in which the technology will be used. Locations and scenarios vary with testing requirements, and first responders from throughout the country serve as subject matter experts and evaluators.



## FIELD TESTED, RESPONDER APPROVED

NUSTL OFAs are typically conducted in a single day and include a technology familiarization session, hands-on testing activities, and a debrief session.

Throughout these activities, NUSTL collects feedback from first responders on the prototype's usability. This information is used to develop an OFA report, which is made available to the first responder community.



## FASTER, SMARTER, SAFER

DHS S&T, including NUSTL, helps first responders get on-scene quicker, work smarter, and stay safer by filling the technology gaps they identify. Since 2013, NUSTL has conducted over 20 OFAs. Listed below are recently completed OFAs:

- *QuickRoute* – a mobile app that shows responders the fastest way to an emergency
- *Enhanced Rescue Hoist Glove* – a glove designed to better withstand helicopter hoist operations
- *Burn Saver* – a wearable sensor that alarms at the thermal limit of self-contained breathing apparatus
- *Automated Driver and Responder Alert System* – a visual, tactile, and audible alert system that improves roadway safety for first responders

For information on innovations that have been commercialized, visit: [www.dhs.gov/science-and-technology/commercialized-technologies](http://www.dhs.gov/science-and-technology/commercialized-technologies).