

We only use cookies that are necessary for this site to function to provide you with the best experience. The controller of this site may choose to place supplementary cookies to support additional functionality such as support analytics, and has an obligation to disclose these cookies. Learn more in our [Cookie Statement](#).

U.S. Fire
Administration



FEMA

EMR-ISAC InfoGram May 5 – Evaluation of new vision system for bomb disposal robots; UL training series on coordinated fire attacks now available

EMR-ISAC sent this bulletin at 05/05/2022 05:09 PM EDT

[View as a webpage / Share](#)

Emergency Management and Response - Information Sharing and Analysis Center (EMR-ISAC)

The InfoGram



Volume 22 — Issue 18 | May 5, 2022

DHS S&T evaluates new vision technology for bomb disposal robots

Bomb technicians have very dangerous jobs. They rely on bomb robots to inspect and manipulate suspect packages or explosives, where the robots are controlled by operators from a safe standoff distance. Operators rely on robot vision systems for video imagery to control the robot.

Last month, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) published an [Operational Field Assessment Report](#) on a vision system for bomb disposal robots to aid a remote operator. The vision system provides stereoscopic imagery for improved depth perception and robot manipulation assistance.

This new Robotic Modular Stereoscopic Retrofit (MSR) System aims to improve an operator's perception of the robot's environment by providing a real-time, high-resolution, three-dimensional image without the need for headsets or special glasses. The MSR is modular, platform-agnostic, and built with commercially available components to be an affordable option for retrofitting existing robots. The camera modules can also be installed on various locations on the robot for different mission scenarios.

DHS S&T's National Urban Security Laboratory (NUSTL) conducted an operational field assessment (OFA) of this MSR System in September 2021. Five experienced bomb technicians



Highlights

[DHS S&T evaluates new vision technology for bomb disposal robots](#)

[Coordinated ventilation and suppression tactics for structure fires: Final course in UL training series now available](#)

[Webinars: How to procure goods and services under a FEMA grant program](#)

[National Homeland Security Conference, July 11-14](#)

[Cyber Threats](#)

evaluated the system on three different robot platforms and under various environmental conditions.

The results of this OFA included positive evaluation of the MSR System's depth perception capability and image quality. The evaluation team made suggestions for improvement in usability of the display screen and the wireless transmission capability to improve the quality of the video feed from the robot.

DHS S&T's NUSTL conducts these OFAs for research projects nearing completion. The objective of the OFA is to assess the technology's capabilities and operational suitability, and to verify and document that project goals were achieved.

The goal of DHS S&T's research and NUSTL's OFA reports is to advance technologies that address mission capability gaps in a rapid time frame, and then promote quick transition of these technologies to the commercial marketplace for use by the nation's first responder community.

Visit DHS S&T's website to read [the full operational field assessment on the Robotic MSR System](#). You can access all publicly released OFA reports from NUSTL on various technical innovations for first responders in [DHS S&T's publications library](#). Access to sensitive OFA reports that are not publicly available is granted on a case-by-case basis by contacting NUSTL@hq.dhs.gov.

(Source: [DHS S&T](#))



The U.S. Fire Administration operates the Emergency Management and Response – Information Sharing and Analysis Center (EMR-ISAC).

For information regarding the EMR-ISAC visit www.usfa.dhs.gov/emr-isac or contact the EMR-ISAC office at: (301) 447-1325 and/or fema-emr-isac@fema.dhs.gov.

[Subscribe here](#)

Coordinated ventilation and suppression tactics for structure fires: Final course in UL training series now available

On May 4 - International Firefighters Day - Underwriters Laboratories' (UL's) Fire Safety Research Institute (FSRI) released the final course in its 3-part series focused on the impact of ventilation on fire dynamics, entitled [Coordination of Suppression and Ventilation in Single-Family Homes](#).

This course covers the basic principles of fire dynamics and the factors that influence fire spread and fire behavior in single-family homes. It also covers the impact of coordinated ventilation and suppression tactics on fire dynamics, firefighter safety, and occupant tenability on the single-family residential fireground.

The new training is part of a series of free, 90-minute independent study courses available via FSRI's [Fire Safety Academy](#).

The three courses in this series are based on a robust research study by UL called the [Study of Coordinated Fire Attack Utilizing Acquired Structures](#) (Coordinated Fire Attack Study). This study was funded by a Federal Emergency Management Agency (FEMA) Assistance to Firefighters Fire Prevention and Safety Grant.

Each course focuses on a unique occupancy type, covering the science of fire dynamics, the findings from the experiments in the Coordinated Fire Attack Study, and tactical considerations for that occupancy type. The three courses and their supporting research are:

- **Strip Malls (large, open volume commercial structures).** The [Impact of Ventilation on](#)

[Strip Mall Fires](#) course is supported by 7 experiments in 4 units of a 12-unit acquired strip mall that was slated for demolition, in collaboration with the Fairborn (Ohio) Fire Department. The results of these experiments are captured in UL's technical report, [Exploratory Analysis of the Impact of Ventilation on Strip Mall Fires](#).

- **Multi-family Dwellings.** The [Coordination of Suppression and Ventilation in Multi-Family Dwellings](#) course is supported by 13 experiments in 4 separate three-story, garden-style buildings, in coordination with the Cobb County (Georgia) Fire and Emergency Services Department and Atlanta Fire Rescue. The results of these experiments are captured in UL's technical report, [Analysis of the Coordination of Suppression and Ventilation in Multi-Family Dwellings](#).
- **Single-family Homes.** [Coordination of Suppression and Ventilation in Single-Family Homes](#), is supported by 20 experiments in 8 acquired, single-family residential structures, in collaboration with City of Sidney (Ohio) Fire Department and the Beavercreek Township (Ohio) Fire Department. The results of these experiments are captured in UL's technical report, [Analysis of the Coordination of Suppression and Ventilation in Single-Family Homes](#).

Firehouse Magazine provides a [Supplement](#) which summarizes the findings of the 3 technical reports, with sections on Ventilation and the Impact on Fire Dynamics, Water Usage and Distribution, and Coordination of Fireground Tactics. In addition to the technical reports, the training series is supported by many videos and photos of the Coordinated Fire Attack experiments.

To learn more about the study's findings and access the training series, visit FSRI's [Coordinated Fire Attack Study page](#).

(Source: [FSRI](#))

Webinars: How to procure goods and services under a FEMA grant program

There are many rules to follow when purchasing goods and services under a Federal Emergency Management Agency (FEMA) grant program. Knowing the federal procurement rules will help increase your chance of securing and keeping the funding you need.

FEMA's Grant Programs Directorate (GPD) is offering a series of one-hour trainings on the federal procurement rules. These virtual trainings will be facilitated by GPD's Procurement Disaster Assistance Team (PDAT). The trainings are 1-hour long and will cover a variety of procurement under grant concepts, frequent compliance issues, and will highlight a variety of resources, including the recently published [PDAT Field Manual](#).

This training is appropriate for FEMA award recipients and subrecipients, including state, local, tribal, and territorial government personnel; nonprofit organization staff; eligible private entities; and other non-Federal entities. This training is also appropriate for FEMA staff.

The upcoming trainings include:

- Prepare Before a Disaster – offered [May 11, 4 – 5 p.m. EST](#) and [June 15, 2 – 3 p.m. EST](#).
- Top 10 Procurement Under Grants Mistakes – offered [May 18, 2 - 3 p.m. EST](#).
- Exigency or Emergency (E&E) Circumstances Training - offered [June 8, 11 a.m. - 12 p.m. EST](#).
- Standard Procurement Under Grant (PUG) Training – offered [June 22, 11 a.m. - 12 p.m. EST](#).

Through this PDAT training FEMA hopes to:

- Increase awareness of applicable contracting requirements when using federal funds under the Public Assistance Program.
- Decrease potential noncompliance.
- Help applicants avoid the potential loss of federal assistance funds.

To learn more about contracting with federal funds for goods and services before, during and after disasters and to register for these and other related trainings, visit FEMA's [Procurement Under Grants](#) page.

(Source: [FEMA](#))

National Homeland Security Conference, July 11-14

This year, the [National Homeland Security Conference](#) will be held in Cleveland, Ohio **from July 11 through July 14, 2022**.

This annual conference brings together professionals in homeland security, law enforcement, fire and emergency management, including officials in federal agencies, nonprofit agencies, business owners, universities and decision makers.

Attendees will learn about emerging trends in homeland security and see the new equipment and technology available to support their mission. The agenda includes tours, workshops, training courses, case studies, presentations, panel discussions, and general sessions.

A few highlights from the [draft conference agenda](#):

- Presentations from the City of Cleveland's Office of Emergency Management and Intelligence Operations.
- A tour of the Cleveland Public Safety Department Emergency Operations Center, which serves as a Command Post for major planned and unplanned events in the City of Cleveland.
- A panel on how Cleveland, Ohio implemented a unified public safety technology platform for intelligence sharing.
- A live search and rescue (SAR) demonstration by Coast Guard Air Station Detroit, supported by Coast Guard Station Cleveland Harbor.
- Discussion of the Christmas Day 2020 Nashville bombing.
- Discussion on Domestic Terrorism in a Post-January 6th World: Implications for Homeland Security and Emergency Management Professionals.
- Training courses and workshops on Unmanned Aircraft Systems (UAS) incident response and use of UAS in disasters.

Early bird pricing for the National Homeland Security Conference is available through **May 11**. To learn more and to register, visit: [nationalhomelandsecurity.org](#)

(Source: [National Homeland Security Association](#))



Cyber Incident Assistance

[MS-ISAC](#)
SOC@cisecurity.org
 1-866-787-4722

[IdentityTheft.gov](#)

[IC3](#)

[Cybercrime Support Network](#)

General Information

[StopRansomware.gov](#)

[CISA's Known Exploited Vulnerabilities Catalog](#)

[FTC scam list](#)

[CISA alerts](#)

[Law Enforcement Cyber Center](#)

[TLP Information](#)

FBI: Business Email Compromise - The \$43 Billion Scam

This Public Service Announcement (PSA) is an update and companion piece to Business Email Compromise [PSA I-091019-PSA](#) posted on www.ic3.gov. This PSA includes new Internet Crime Complaint Center complaint information and updated statistics from October 2013 to December 2021.

Business Email Compromise/Email Account Compromise (BEC/EAC) is a sophisticated scam that targets both businesses and individuals who perform legitimate transfer-of-funds requests.

The BEC/EAC scam continues to grow and evolve, targeting small local businesses to larger corporations, and personal transactions. The BEC scam has been reported in all 50 states and 177 countries, with over 140 countries receiving fraudulent transfers.

Read the [full PSA](#) at the Federal Bureau of Investigation's (FBI's) [Internet Crime Complaint Center](#) (IC3).

(Source: [FBI IC3](#))

HSCC: Operational Continuity-Cyber Incident (OCCI) Checklist

The Health Sector Coordinating Council's (HSCC) Cybersecurity Working Group (CWG) published the [Operational Continuity-Cyber Incident \(OCCI\) Checklist](#). This toolkit is intended to provide a flexible template for operational staff and executive management of healthcare organizations to respond to and recover from an extended enterprise outage due to a serious cyber-attack. It represents the best collective thinking of health sector cybersecurity and emergency management executives contributing to the HSCC Incident Response/Business Continuity (IRBC) Task Group.

(Source: [HSCC CWG](#))

Microsoft finds new elevation of privilege Linux vulnerability, Nimbuspwn

Microsoft has discovered several vulnerabilities, collectively referred to as Nimbuspwn, that could allow an attacker to elevate privileges to root on many Linux desktop endpoints. The vulnerabilities can be chained together to gain root privileges on Linux systems, allowing attackers to deploy payloads, like a root backdoor, and perform other malicious actions via arbitrary root code execution. Moreover, the Nimbuspwn vulnerabilities could potentially be leveraged as a vector for root access by more sophisticated threats, such as malware or ransomware, to achieve greater impact on vulnerable devices.

(Source: [Microsoft](#))

Tractor-trailer brake controllers vulnerable to remote hacker attacks

Researchers have analyzed the cyber security of heavy vehicles and discovered that the brake controllers found on many tractor-trailers in North America are susceptible to remote hacker attacks.

The research was conducted by the [National Motor Freight Traffic Association \(NMFTA\)](#), which is a non-profit organization that represents roughly 500 motor freight carriers, in collaboration with Assured Information Security, Inc.

NMFTA has been analyzing the cyber security of heavy vehicles since 2015 and it has periodically [disclosed its findings](#). The latest report from the organization came in early March, when the US Cybersecurity and Infrastructure Security Agency (CISA) also issued an [advisory](#) to describe two vulnerabilities affecting trailer brake controllers.

(Source: [Security Week](#))

More details emerge on China's widespread Ukraine-related hacking efforts

More details are emerging about the activities of a prolific Chinese government hacking group and how it's used Russia's invasion of Ukraine as part of its ongoing efforts to infiltrate a diverse range of target networks across three continents in pursuit of espionage and information theft.

Mustang Panda — [otherwise known](#) as Bronze President, HoneyMyte or RedDelta — has been targeting European and Russian entities using topical phishing lures coinciding roughly with the start of the Russian war to deliver malware.

(Source: [CyberScoop](#))

The InfoGram is distributed weekly to provide members of the Emergency Services Sector with information concerning the protection of their critical infrastructures.

Fair Use Notice:

This InfoGram may contain copyrighted material that was not specifically authorized by the copyright owner. The EMR-ISAC believes this constitutes “fair use” of copyrighted material as provided for in section 107 of the U.S. Copyright Law. If you wish to use copyrighted material contained within this document for your own purposes that go beyond “fair use,” you must obtain permission from the copyright owner.

Disclaimer of Endorsement:

The appearance of external hyperlinks does not constitute endorsement of the linked websites or the information, products or services contained therein. Reference to any specific commercial products, process or service by trade name, trademark, manufacturer or otherwise, does not necessarily constitute or imply its endorsement, recommendation or favoring by the EMR-ISAC or the U.S. government.

Section 504 Notice:

Section 504 of the Rehabilitation Act requires that FEMA grantees provide access to information for people with disabilities. If you need assistance accessing information or have any concerns about access, please contact FEMAWebTeam@fema.dhs.gov.

Update your subscriptions, modify your password or e-mail address, or stop subscriptions at any time on your [Subscriber Preferences Page](#). You will need to use your e-mail address to log in. If you have questions or problems with the subscription service, please contact subscriberhelp.govdelivery.com.

[Privacy Policy](#) | GovDelivery is providing this information on behalf of U.S. Department of Homeland Security, and may not use the information for any other purposes.

Subscribe to updates from EMR-ISAC

Email Address e.g. name@example.com

Share Bulletin



Powered by



[Privacy Policy](#) | [Cookie Statement](#) | [Help](#)