

HOMELAND

Defense & Security Digest

The Latest From the Homeland Defense & Security Information Analysis Center // November 7, 2023



WARRIOR CARE MONTH

November is Warrior Care Month, a month dedicated to supporting wounded, ill, or injured service members and veterans. It was established as part of an effort to raise awareness of the physical, mental, and emotional needs of our Warfighters and highlight the recovery coordination resources and programs available.

Learn more about Warrior Care here: Home (dodlive.mil). [READ MORE](#)

DID YOU MISS OUR LAST WEBINAR?

“Radiation Biodosimetry: Where We Are and Where We Need to Go”

[WATCH NOW!](#)

[or download the slides](#)

NOTABLE TECHNICAL INQUIRY

Is there any research on the behavioral and mental health issues unique to National Guard forces?

The Homeland Defense and Security Information Analysis Center (HDIAC) was asked to identify any studies, reports, and ongoing research on behavioral and mental health issues specific to the U.S. National Guard, including both the Army National Guard (ARNG) and the Air National Guard (ANG). [READ MORE](#)

UPCOMING WEBINAR



**From Lab to the Literal Field:
Custom-Fit, 3-D-Printed
Medical Devices and ...**

December 14, 2023
12:00 PM – 1:00 PM

Presenter: Michael E. Zabala, Ph.D.

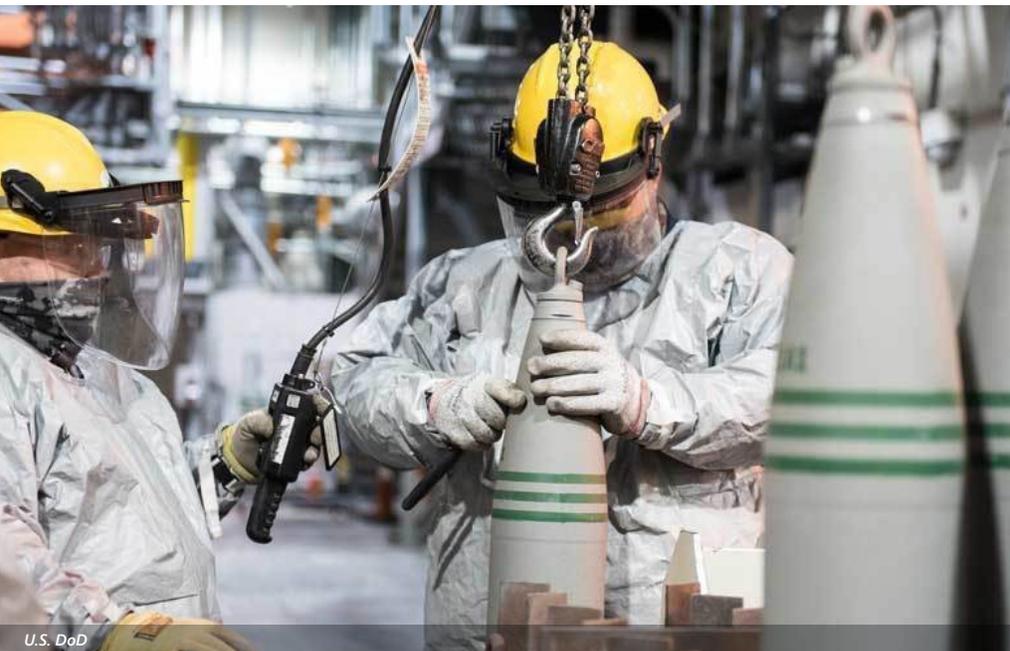
Host: HDIAC

In early fall of 2019, Dr. Michael Zabala received a phone call from his neighbor, Robbie Stewart, the head athletic trainer for Auburn Football. A wide receiver had a broken hand, and Robbie wanted to know if the Auburn University Biomechanical Engineering Lab could make a custom device to... [READ MORE](#)

FUTURE WEBINARS

**Homeland Defense and
Future Warfighting...**

January 11, 2024
12:00 PM – 1:00 PM



U.S. DoD

HIGHLIGHT

DoD Celebrates Destruction of Its Last Chemical Agents

On July 7, disposal experts destroyed the last remaining M55 rocket filled with deadly sarin nerve agent at a storage facility in Kentucky.

With the disposal, the Defense Department completed the safe elimination of all declared chemical agents amassed between World War I and the late 1960s. The U.S. stockpile once consisted of about 30,600 tons of chemical warfare agents. [LEARN MORE](#)

EVENTS

Materials in Nuclear Energy Systems (MiNES 2023)

December 10–14, 2023

New Orleans, LA

Want your event listed here?

Email contact@hdiac.org to share your event.

The 12th IEEE Electrical Energy Storage Applications and Technologies (EESAT) Conference

January 29–30, 2023

San Diego, CA



VOICE FROM THE COMMUNITY

Ken Erney

Director of Autonomous Systems and Robotics at Unmanned Experts, Inc.

As the Director of Autonomous Systems and Robotics at Unmanned Experts, Inc., Ken Erney manages a team that designs and builds the hardware that their extensible air traffic management (XTM) runs on, the SDR-based communications fabric their products use to collaborate, and the software that provides their flight systems with advanced intelligence and perception. The team is comprised of highly focused professionals pursuing U.S. technological superiority through the synthesis of autonomous robotics, swarms, and XTM systems.

ARE YOU A SME?

If you are a contributing member of the information systems community and are willing to help others with your expertise, you are a subject matter expert (SME)!

Join our team today!

**BECOME A SUBJECT
MATTER EXPERT**

ABOUT TECHNICAL INQUIRIES (TIs)

WHAT IS THE TI RESEARCH SERVICE?

- FREE service conducted by technical analysts
- 4 hours of information research
- Response in 10 business days or less

WHO CAN SUBMIT A TI?

- U.S. government (federal, state, or local)
- Military personnel
- Contractors working on a government or military contract

WHY UTILIZE THE TI RESEARCH SERVICE?

- Get a head start on your technical questions or studies
- Discover hard-to-find information
- Find and connect with other subject matter experts in the field
- Reduce redundancy of efforts across the government

To submit a TI, go to <https://hdiac.org/technical-inquiries>

FOR MORE: FOLLOW US ON SOCIAL!



RECENT HDIAC TIs

- Are there any COTS solutions for unmanned CBRN sample transport via unmanned aerial vehicles?
- What are the challenges of deploying from a contested homeland, and how can the United States address those issues from a "whole-of-nation" resiliency approach?
- Can you provide historical chemical agent permeation testing using polyethylene film under the fabric swatch to simulate skin?

RECENT CSIAC & DSIAC TIs

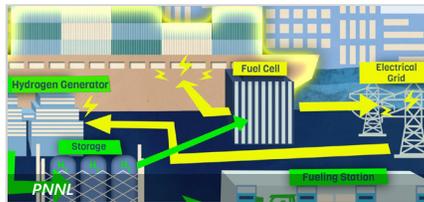
- What are the state-of-the-art use cases for AI and ML in aviation?
- Can you identify UAS technologies that can launch from a manned aircraft, is cost-effective, attritable, or recoverable, and allows quick integration of new technologies?
- What Pk tables can be used for modeling and simulation DEWs?

FEATURED NEWS

MARVEL Microreactor Reaches Final Design Step

The U.S. Department of Energy's (DOE's) MARVEL microreactor achieved 90 percent final design, a key step that will allow the project to move forward with fabrication and construction. [READ MORE](#)

RECENT NEWS



Pacific Northwest Set to Launch Hydrogen Energy Hub

Pacific Northwest National Laboratory



U.S. Air Force

Moving Blood Across the Middle East

U.S. Air Force



U.S. Army

Global Hydro Intelligence Analysis Unlocks Secure Water Resources

U.S. Army



U.S. Army

Task Force Marne, NATO Allies Tour Northeastern Poland's Cultural Sites

U.S. Army



U.S. Army

System Provides Critical, Real-Time Health Data at Best Squad Competition

U.S. Army



Berkeley Lab

Making RAD Maps With Robot Dogs

Berkeley Lab



Alternative Energy



Biometrics



CBRNE Defense



Critical Infrastructure Protection



Cultural Studies



Homeland Defense & Security



Medical



Weapons of Mass Destruction

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4695 Millennium Drive, Belcamp, MD 21017
443-360-4600 | contact@hdiac.org | hdiac.org
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