

HOMELAND

Defense & Security Digest

The Latest From the Homeland Defense & Security Information Analysis Center // February 8, 2021



[SUBMIT A TECHNICAL INQUIRY](#)

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NOTABLE TECHNICAL INQUIRY

Are there any novel charging solutions or batteries with longer life expectancy?

HDIAC identified several options for self-charging systems and longer-duration batteries. HDIAC found that the best approach is to exchange the current lead-acid batteries for lithium-ion (Li-ion) batteries of a similar size and charge capacity. Several HDIAC subject matter experts (SMEs) confirmed this as the best approach, and HDIAC analysts could not identify any technical reason prohibiting the integration of existing field camera systems with Li-ion batteries. However, because this approach would potentially... [READ MORE](#)



SNEAK PEEK

UPCOMING WEBINAR:

Introduction to the Interagency Modeling and Atmospheric Assessment Center (IMAAC)

DATE:

February 16, 2022

TIME:

12:00 PM

PRESENTED BY:

Dr. Andy Grose

HOST:

HDIAC



VOICE FROM THE COMMUNITY

Janine Medina

Executive Director, Biohacking Village

Working in ambulatory and hospital environments, Ms. Medina has managed the complexities in modernizing legacy systems within the healthcare industry that originated when electronic medical records, associated IoMT devices, and applications connectivity were conceptually new and laws were being adapted to meet the novel technologies. Over seven years, she expanded the Biohacking Village to foster a culture of continuous improvement in educational programs focusing on quality and safety through research and outcomes analysis. This expansion included five labs designed to engage and educate on the best practices of care to focus on the biotechnology, citizen science, and cybersecurity of the healthcare sector, pharmaceutical industry, and biomedical ecosystem. Ms. Medina also served as the 2021 Presidential Innovation Fellow. Read more about her time as a Fellow here: <https://presidentialinnovationfellows.gov/fellows/janine-medina>.

BECOME A SUBJECT MATTER EXPERT



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HIGHLIGHT

Artificial Intelligence (AI) and Machine Learning (ML) in Biometric Data Fusion

This State-of-the-Art Report focuses on recent advances in biometric recognition technologies and the application of artificial intelligence and machine learning to recognition tasks in multimodal identification systems. Multimodal systems use “feature-level” data fusion (e.g., periocular and gait recognition), which provides faster reference set... [LEARN MORE](#)

FEATURED NEWS

Paint-on Protection

Tests of newly developed temporary overcoats for tactical military equipment showed a reduction in the amount of absorbed chemical warfare agents (CWAs) by fivefold to a hundredfold, and the coatings remained effective beyond eight weeks in normal environmental conditions. Current military equipment coatings provide visual camouflage and corrosion protection but still require enhanced resistance to CWA penetration. The Defense Threat Reduction Agency’s (DTRA’s) Chemical and Biological Technologies Department, in its role as the Joint Science and Technology Office (JSTO) for the Chemical and Biological Defense Program, is investing in testing a variety of new temporary coatings that are compatible with... [READ MORE](#)

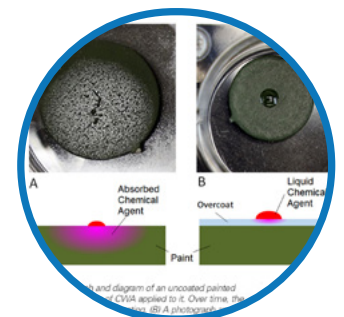


Image: DTRA



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WEBINARS

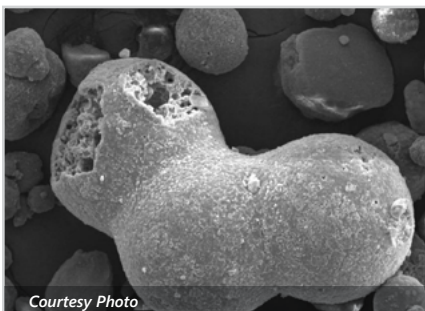
Introduction to the Interagency Modeling and Atmospheric Assessment Center (IMAAC)

Presented: February 16, 2022 12:00 PM–1:00 PM

Presenter: Dr. Andy Grose

Host: HDIAC

The mission of the IMAAC is to provide a single point for the coordination and dissemination of federal dispersion modeling and hazard prediction products that represent the federal position during actual or potential incidents involving hazardous atmospheric releases. [LEARN MORE](#)



Courtesy Photo

DSIAC: Advanced Spray-Drying Technology for the U.S. Department of Defense (DoD)

February 23, 2022
12:00-12:45 PM



U.S. Army

CSIAC: Digital Transformation of SATCOM Networks

February 23, 2022
12:00-12:45 PM

EVENTS

Moving to a 3-D Energy Landscape

February 21-24, 2022



Image: U.S. Air Force

Power and Energy Conference at Illinois

March 10-11, 2022



Image: DVIDS

International Conference on Biometric Engineering and Applications (ICBEA044 2022: 16)

April 21-22, 2022



Image: DVIDS

11th Symposium on CBRNE Threats

June 5-8, 2022

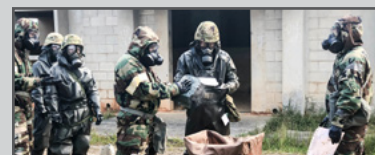


Image: U.S. DoD

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RECENT NEWS



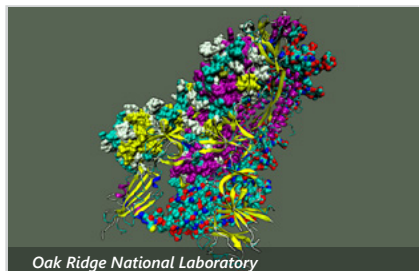
New Device Detects Heat Strain in Military Trainees

Medical



DIU FY2021 Annual Report

Alternative Energy; HD & Security



Supercomputing Exposes Potential Pathways for Inhibiting COVID-19

Medical



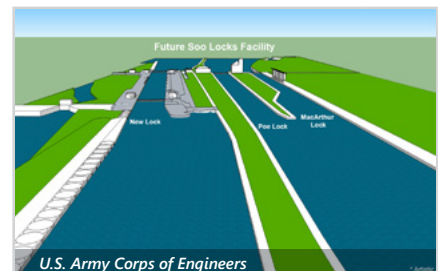
Researchers Connect With Warfighters to Guide Tech Development

Medical



COVID-19 and Superpower Competition: An Effective American Response

Homeland Defense & Security; Medical



Corps of Engineers Receiving \$561 Million From Infrastructure Bill for Michigan, Great Lakes

Critical Infrastructure Protection

