

# DEFENSE

## Systems Digest

The Latest From the Defense Systems Information Analysis Center // June 21, 2022



SUBMIT A TECHNICAL INQUIRY

U.S. Air Force

## NOTABLE TECHNICAL INQUIRY

**Who are the key contributors to U.S. Department of Defense (DoD) research efforts in infrasound, and what are their contributions?**

The Defense Systems Information Analysis Center (DSIAC) was asked to identify key contributors to DoD research efforts in infrasound. Infrasound is classified as sound waves with frequencies lower than 20 hertz (Hz) cycles per second. A variety of things produces infrasound, including natural disasters and animals. Sources of infrasound are in the range from very low-frequency atmospheric fluctuations up to the lower audio frequencies. DSIAC searched open-source documents and the Defense Technical... [READ MORE](#)



## SNEAK PEEK

### UPCOMING WEBINAR:

*Human Agent Interaction for Intelligent Squad Weapon*

### DATE:

July 13, 2022

### TIME:

12:00 PM

### PRESENTED BY:

Mr. Andrew Tweedell

### HOST:

DSIAC



## VOICE FROM THE COMMUNITY

### Mark S. Johnson

*Ph.D. DABT, Toxicology Director, U.S. Army Public Health Center*

As the Director of Toxicology, Dr. Johnson is responsible for the operational and technical arm of the Army Surgeon General and the Assistant Secretary of the Army for toxicological matters. He has worked extensively in evaluating the toxicity of military unique compounds and developing and evaluating a phased approach to gathering toxicity data for new compounds. He is a fellow and a member of the Board of Directors of the International Board of Environmental Risk Assessment, SETAC North America, and the Academy of Toxicological Sciences. Dr. Johnson has authored over 100 peer-reviewed publications, book chapters, and technical reports and serves on several NATO and EPA panels.

**BECOME A SUBJECT  
MATTER EXPERT**



*U.S. Army*

## HIGHLIGHT

### HDIAC to Host Virtual DART and UASPD Training

After the success of our Drone Assessment and Response Tactics (DART) and Unmanned Aerial Systems Program Development (UASPD) training held last April, HDIAC is pleased to announce a VIRTUAL and FREE DART/UASPD course. This course will be held online from October 4-5, 2022. [LEARN MORE](#)

## FEATURED NEWS

### Leadership Key to Moving Defense Department Toward Data-Driven Future

In April, the Defense Department hired a former computer science professor and head of machine learning for Lyft to elevate digital and artificial intelligence strategy development and policy formulation.

As chief digital and artificial intelligence officer, Craig Martell is responsible for accelerating the adoption of data, analytics, digital solutions, and AI functions. But shifting the largest agency in the federal government toward a data-driven future is a tall order. "Such a task will require a skilled leader and will require a lot of people to be convinced of the value of what DoD is trying to achieve." Deputy Defense Secretary Kathleen H. Hicks said. [READ MORE](#)

*Image: U.S. DoD*





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## WEBINARS

### Human Agent Interaction for Intelligent Squad Weapon

*Presented:* July 13, 2022 12:00 PM - 12:45 PM

*Presenter:* Mr. Andrew Tweedell

*Host:* DSIAC

New priorities have emerged from the Army’s Multi-Domain Operations (MDO) concept that establishes the importance of artificial intelligence (AI) and machine learning (ML) on a continuously evolving battlefield. The current iterative cycle of continuously collecting data, discarding irrelevant data, annotating objects offline, and then training and deploying new models is resource-intensive and unsustainable for chaotic combat environments. We propose a unique human-autonomy interaction approach that leverages a Soldier’s innate adaptability to changing environments and emergent threats. Opportunistic sensing is an approach in which operational data required for AI/ML algorithms are obtained as unobtrusively as possible from tasks a Soldier is already... **LEARN MORE**



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**Microwave and Millimeter-Wave Imaging Techniques For Nondestructive Evaluation (NDE)**

August 17, 2022 12:00 PM



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**X-Ray Computed Tomography as a Reverse Engineering Tool**

September 1, 2022 12:00 PM

## EVENTS

### JAS FY23 Proposal Review Meeting

June 22-23, 2022

### National Space & Missile Materials Symposium

June 27-30, 2022

### Aviation Forum

June 27-July 1, 2022

### International Armored Vehicles (IAV) USA

June 29-30, 2022

### Eglin AFB Tech Expo

June 30, 2022

### 2022 MSS Tri-Service Radar Symposium (TSRS)











July 11-15, 2022

### Electric Aircraft Symposium

July 23-24, 2022

**Want your event listed here?**

Email [contact@dsiac.org](mailto:contact@dsiac.org), to share your event.

-  Advanced Materials
-  Autonomous Systems
-  C4ISR
-  Directed Energy
-  Energetics
-  Military Sensing
-  Non-Lethal Weapons
-  RMQSI
-  Survivability & Vulnerability
-  Weapons Systems

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## RECENT NEWS



U.S. DOE

### Closed-Loop Additive Manufacturing Fueled By Upcycled Plastic

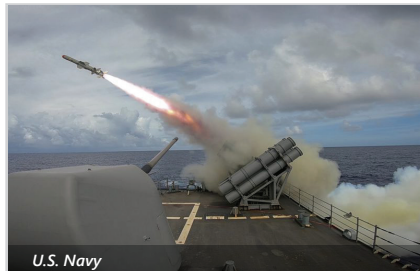
Advanced Materials



DEVCOM

### DEVCOM Soldier Center Designs Protective Jumpsuit For Elite Firefighters

Survivability & Vulnerability



U.S. Navy

### Harpoon Weapon System, More Howitzers Headed to Ukraine

Weapons Systems



AFRL

### New AFRL Virtual Range to Bring Directed Energy Capabilities to Warfighters

Directed Energy



DARPA

### MINC Program Aims to Enable Critical Data Flow Even in Contested Environments

C4ISR



U.S. Air Force

### AFRL Leads Effort to Develop, Test Hybrid Halvorsen Aircraft Loader Prototype at Two AMC Aerial Ports

Autonomous Systems;  
RMQSI

