

Defense Systems DIGEST

26 FEBRUARY 2019 – THE LATEST FROM DEFENSE SYSTEMS INFORMATION ANALYSIS CENTER



NOTABLE TECHNICAL INQUIRY

What unattended ground sensors are currently available?

DSIAC subject matter experts (SMEs) surveyed open and other sources to compile a listing of unattended ground sensor (UGS) original equipment manufacturers (OEMs), their UGS products, and UGS characteristics such as sensor type, threat detection capabilities, communications capabilities, operational time, size... [Read More](#)

► **SUBMIT YOUR TECHNICAL INQUIRY – 4 hours of research service for FREE**

FEATURED NEWS



Summary of the 2018 Department of Defense Artificial Intelligence Strategy

The U.S. Department of Defense (DoD) protects our nation by deterring war and winning the nation's wars when deterrence fails. In fulfilling this mission, we have always been at the forefront of technological advances to ensure an enduring competitive military advantage against those who threaten our security and safety. Artificial intelligence (AI) is one such technological advance. AI refers to the ability of machines to perform tasks that normally require human intelligence — for example, recognizing patterns, learning from experience, drawing... [Read More](#)

MODEL OF THE MONTH

DREAM – DREAM simulates the interaction between a High-Power Radio Frequency/Microwave Directed Energy Weapon (HPM DEW) and a target system. The interface calculates/estimates a target's probability of electronic upset and/or damage as a function of the HPM DEW power density on target and range. DREAM is primarily used for making pre-test predictions and investigating the HPM DEW concepts.

[Get this model!](#)



VOICE FROM THE COMMUNITY



Jesse Frantz, *Physicist, U.S. Naval Research Laboratory's Optical Science Division*

I am a physicist with over 15 years of experience in optical materials and thin films within the U.S. Naval Research Laboratory's Optical Science Division. I am currently the Head of the Specialty Waveguide Section where we carry out research on novel waveguide materials and structures. We work with a variety of material systems, specializing in those with transparency in the mid-infrared and those that are not being developed outside of the DoD. Currently, I am working on a novel, chip-based, non-mechanical, beam steering technology that aims to replace gimbals with a lighter, more compact solution.

► Apply to be part of our network of over 1,000 subject matter experts.

UPCOMING EVENTS

Military Sensing Symposium (MSS) 2019 Parallel Conference

25 February 2019 to 28 February 2019

Amazing Grace – Defense Innovation Event

26 February 2019 to 27 February 2019

Additive Manufacturing (AM) for Aerospace and Space

26 February 2019 to 28 February 2019

2019 Air Warfare Symposium

27 February 2019 to 1 March 2019

► Want your event listed here? Let us know!

BULLETIN BOARD

AJEM Version 2.56 Now Available

Do You Have a Nominee for the 2020 AIAA Survivability Award?

No More “Playing Defense” for U.S. Navy; Offensive Weapons Are the Play

► Add your item to our board by contacting us.

DSIAC JOURNAL WINTER 2019



Measuring Combustion Products in Small Arms Blowback Gases

Also in This Issue:

- American “Astrologistics”
- Modular Human Surrogate for Non-Lethal Weapons (NLW) Testing
- Sustainable Mobile Electrical Infrastructure
- Active Electronically Steered Array (AESA) Antenna Testing



► Have an idea for a topic? Please contact us to write an article!

RECENT NEWS



ADVANCED MATERIALS

Advanced Materials Are Shaping the Future of Polymer-Based Additive Manufacturing



AUTONOMOUS SYSTEMS

It's a Cat and Mouse Game as Militaries Fight the Big Threat of Small Drones



DIRECTED ENERGY

Air Force Looking for Research on Bioeffects of Directed-Energy Applications



ENERGETICS

Pentagon Needs to Start an "Energetics Renaissance"



MILITARY SENSING

Air Force Approaching Industry for Adaptive Optics Technologies in Ground-Based Space Situational Awareness



NON-LETHAL WEAPONS

USMC Wants Truck-Mounted Plasma Weapon to Temporarily Blind, Deafen, and Even Yell at People



RMQSI

A Vicious Cycle: The U.S. Military's Maintenance and Modernization Problem



SURVIVABILITY AND VULNERABILITY

Ground Troops to Receive Lighter, Tougher Body Armor



WEAPON SYSTEMS

Meet the Falcon, a New Short-Range Air Defense System

NOTABLE TASK ORDERS



Notable Task Orders are summaries of the most recent and impactful work done by DSIAC through externally-funded Task Orders. These externally-funded Task Orders are established in support of government customers who want to leverage DSIAC expertise for specific scientific or technical research and analysis efforts that exceed the DSIAC Basic Center of Operation's (BCO) free services (such as technical inquiries).

[Read More](#)

ABOUT THIS PUBLICATION: The inclusion of hyperlinks does not constitute an endorsement by DSIAC or U.S. Department of Defense (DoD) of the respective sites, nor the information, products, or services contained therein. DSIAC is a DoD-sponsored Information Analysis Center with policy oversight provided by the Office of Under Secretary of Defense for Research and Engineering (OUSD(R&E)) and is administratively managed by the Defense Technical Information Center (DTIC). Reference herein to any specific commercial products, process, or services by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the U.S. Government or DSIAC.

Defense Systems Information Analysis Center
4695 Millennium Drive, Belcamp, MD 21017
Phone: 443-360-4600
Unsubscribe | DSIAC Journal | dsiac.org | Past Digests

