

Defense Systems

DIGEST

4 JUNE 2019 – THE LATEST FROM DEFENSE SYSTEMS INFORMATION ANALYSIS CENTER



NOTABLE TECHNICAL INQUIRY

What technologies are available as a target illumination laser and LED for use on fixed wing aircraft?

DSIAC received a request for information on nonvisible lasers, LEDs, or other technologies for target illuminators at a high technologies readiness level (TRL) that meets given requirements. A DSIAC subject matter expert contacted a variety of original equipment manufacturers, government organizations, and contractors. A list of commercial off-the-shelf... [Read More](#)

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

FEATURED NEWS

The U.S. Department of Defense (DoD) Seeks to Expand Competition, Innovation in Research

The Defense Department recently began an initiative called the Defense Established Program to Stimulate Competitive Research (DEPSCoR).

What Is It?

DEPSCoR is all about searching underrepresented U.S. “states and territories for researchers with important contributions to [DoD’s] scientific enterprise,” said Bindu Nair, acting director of the DoD’s Basic Research Office. “It’s crucial that we build a [DoD] research infrastructure that leaves no state behind.”



Nair said that institutions of higher education are especially relevant for building research capacity as they are incubators of science and engineering research and they operate under robust peer-review systems.

Why Is It Important?

To avoid technological surprise and to maintain battlefield dominance against peer competitors like Russia... [Read More](#)

VOICE FROM THE COMMUNITY



Claude Phipps, Ph.D., Managing Partner, Photonic Associates, LLC

As a physicist, I work on new applications of laser propulsion while incorporating data. These applications involve rep-pulse, ultraviolet, and short-pulse lasers, which provide better mechanical coupling and less target heating. My expertise includes laser interaction with surfaces, modeling and measurements, design of high-energy laser systems for fusion and propulsion, optical diagnostics of plasmas, and general plasma physics. I have worked with NASA on research initiatives, including a validation study of "Orion,"

a laser space debris removal concept. I have a Ph.D. in plasma physics from Stanford and master's and bachelor's degrees in electrical engineering from Massachusetts Institute of Technology.

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

UPCOMING EVENTS

2019 Joint Army-Navy-NASA-Air Force (JANNAF) Meeting

3 June 2019 to 7 June 2019

The Wright Dialogue With Industry (WDI)

16 July 2019 to 18 July 2019

Space & Missile Defense (SMD) Symposium

6 August 2019 to 8 August 2019

Conference on Smart Materials, Adaptive Structures, and Intelligent Systems (SMASIS)

9 September 2019 to 11 September 2019

► Want your event listed here? Let us know!

SEEKING YOUR KNOWLEDGE

Do you have any information on the legacy codes DAGER and SABER?

Do you have real-life failure data for small AC, three-phase motors?

What tools are available to determine the launch acceptability region (LAR) for a tube-launched UAS given a set of flight performance characteristics?

► To learn more about technical inquiries click here!

DSIAC JOURNAL SPRING 2019



Random Error in Small-Caliber Dispersion

Also in This Issue:

- Additive Manufacturing for Aerospace Maintenance and Sustainment
- Microdiode Lasers: A Safer Alternative for Electrically-Fired Energetic Devices
- A Titanium-Based Igniter System for Hand-Grenade Fuzes
- Laser Power Beaming



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

RECENT NEWS



The Navy Can Now 3-D Print Submarines on the Fly for SEALs



Soldiers Train With Army's First Personal Unmanned Aerial System



U.S. Air Force Successfully Shoots Multiple Air-Launched Missiles in Laser Weapon Test



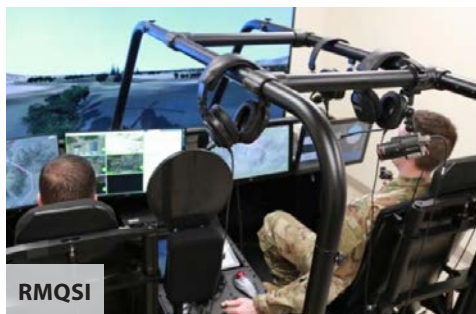
Scientists Develop New Recycling Technology for Heavy Duty Military Batteries



Army Receives 400th SRCTec Lightweight Counter-Mortar Radar System



Are Non-Lethal Laser Drones the New Stun Guns?



Aviation, Missile Center Simulator Supports Army Readiness



Military Camouflage Technology: Countering Thermal Imaging



Army Tests Extended-Range Rockets



DSIAC Journal: Call for Articles

DSIAC publishes research and development (R&D) and engineering articles in a quarterly journal that is distributed to more than 35,000 members. The articles explore new ideas and emerging trends in science and engineering in nine focus areas: Advanced Materials; Autonomous Systems; Directed Energy; Energetics; Military Sensing; Non-Lethal Weapons; Reliability, Maintainability, Quality, Supportability, and Interoperability (RMQSI); Survivability & Vulnerability; and Weapon Systems. The goal of the DSIAC Journal is to help researchers, engineers, and technical managers by providing a forum in which to share their expertise and lessons learned throughout the community and minimize redundant research. We publish original and high-quality papers, with the objective of covering the latest developments in engineering and/or technologies.

Publication Dates:

Fall 2019

Abstract deadline: 10 June 2019

Article deadline: 15 July 2019

Winter 2019

Abstract deadline: 2 September 2019

Article deadline: 18 October 2019

For more information, contact the editor-in-chief at brian.benesch@dsiac.org.

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