

DEFENSE

Systems Digest

The Latest From the Defense Systems Information Analysis Center // July 15, 2025

STATE-OF-THE-ART REPORT (SOAR)

The latest DSIAC SOAR "Attributable Unmanned Aircraft Systems: Conceptualization and Key Players" is available for download. In support of a U.S. Department of Defense priority for fielding attributable systems, this report provides the state of the art for attributable aircraft for multidomain operations. DSIAC will be hosting a future webinar on this SOAR, so stay tuned for more information.

Read and download the SOAR here:
<https://dsiac.dtic.mil/state-of-the-art-reports/attributable-unmanned-aircraft-systems-conceptualization-and-key-players/>.

DID YOU MISS OUR PAST WEBINAR?

"Digital Twin Research and Development for a Metal Additive Manufacturing Process"

 WATCH NOW!

[or download the slides](#)

NOTABLE TECHNICAL INQUIRY

Can infrared (IR) hyperspectral imagery be acquired from IR multispectral sensors?

Hyperspectral imaging systems are able to address critical challenges, ranging from detecting chemical, biological, radiological, nuclear, and explosives materials to identifying targets from remote distances. However, due to their complexity, these sensors are expensive to build, maintain, and operate. A promising solution that has been recently explored is to leverage the abundance of inexpensive and mature multispectral cameras to reconstruct... [READ MORE](#)

UPCOMING WEBINAR



Attributable Unmanned Aircraft Systems: Conceptualization...

COMING SOON
12:00 PM – 1:00 PM

Presenter(s): Deanna Milonas, Taylor H. Knight

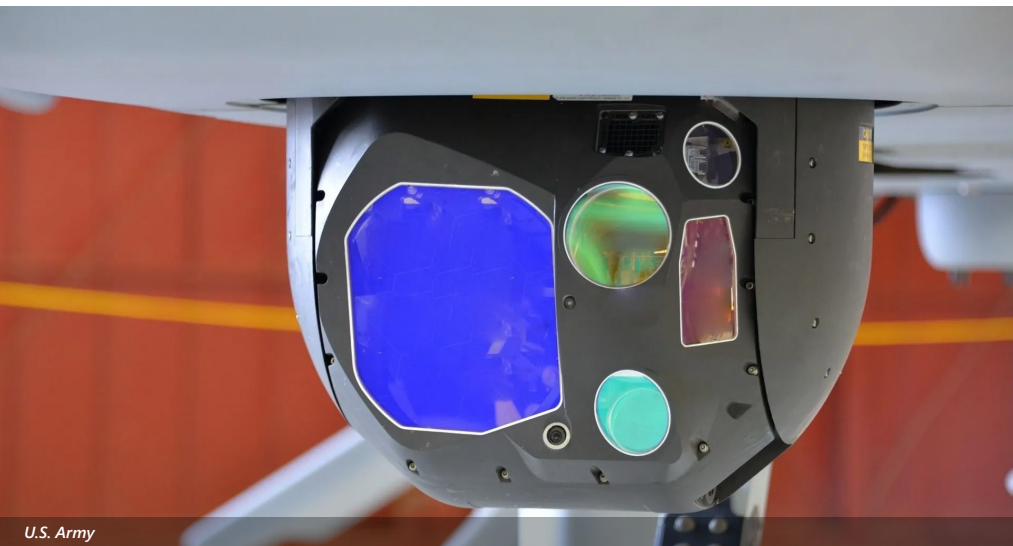
Host: DSIAC

Air domain operations are critical to the U.S. military defense strategy. Military air domain missions use aircraft for tasks like attack; resupply; rescue; intelligence, surveillance, and reconnaissance; etc. Historically, air domain missions required manned aircraft, putting the aviator at... [READ MORE](#)

FUTURE WEBINAR

Automated Impacts Routing – Path Optimization Through Adverse Atmospheric Effects and Obstacles

COMING SOON
1:00 PM – 2:00 PM



U.S. Army

HIGHLIGHT

PD SAI to Deliver Updated CSP Cooling Shroud Design

Every combatant command has its own set of challenges that soldiers need to overcome and adapt to. In the Operation Inherent Resolve (OIR) theater in the U.S. Central Command, one of these challenges is extreme heat.

Two years ago, soldiers identified a need to provide cooling to the unit's Common Sensor Payloads (CSPs) that were being exposed to extremely high temperatures while sitting on the tarmac before missions. This would cause the sensor to overheat and shut off, or in some cases, cause more significant electronic equipment failure, requiring the unit to return the turret to the depot for repair... [LEARN MORE](#)

EVENTS

Joint Aircraft Survivability Program (JASP) Model Users Meeting (JMUM) 2025
August 4–8, 2025
Virtual

.....

Future Force Capabilities Conference & Exhibition
September 30–October 3, 2025
Fort Worth, TX

Want your event listed here?
Email contact@dsiac.org to share your event.



VOICE FROM THE COMMUNITY

Joseph Braus
Gunnery Sergeant, U.S. Marine Corps

Joseph Braus instructs Marines in assault support tactics and aviation maintenance and works with simulated aviation training specific to the enlisted air crew. He supports the integration of aviation simulators into initial and proficiency training to enhance the air crew's ability to execute flight operations safely and effectively. He is a qualified crew resource management instructor, aviation safety specialist, ground mishap investigator, and quality assurance representative.

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**

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://dsiac.dtic.mil/technical-inquiries>



EXAMPLE DSIAC TIs

- What is the state of the art for infrared (midwave, long wave) ceramics/glasses used for sensor protection and sensor shields?
- What intermediate force capabilities/nonlethal weapons have possible applications in the maritime domain?
- Can a list of available publications and subject matter experts on gun system aiming logic be provided?

[MORE DSIAC INQUIRIES](#)

EXAMPLE CSIAC & HDIAC TIs

- What information is available for M61 filter breakthrough times?
- Can any U.S. military doctrine that mentions the Sphere Handbook or Sphere Project be provided?
- Who can provide information on getting approval to use something like NotebookLM on closed-loop U.S. Department of Defense computers?

VIEW MORE TIs

The Information Analysis Centers answer more inquiries outside the scope of DSIAC's focus areas. To search more research topics, visit our sister websites to expand your search.

[CSIAC INQUIRIES](#)

[HDIAC INQUIRIES](#)

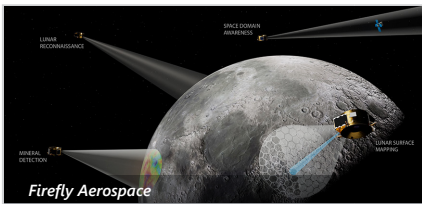


FEATURED NEWS

Career Exploration: Using Ingenuity and Innovation to Create "Memory Metals"

Othmane Benafan is a NASA engineer whose work is literally reshaping how we use aerospace materials — he creates metals that can shape shift. Benafan, a materials research engineer at NASA's Glenn... [READ MORE](#)

RECENT NEWS



LLNL's High-Resolution Telescope System to Usher in a New Era of Lunar Exploration

Lawrence Livermore National Laboratory



DARPA to Demonstrate Revolutionary Drone Capabilities for Warfighters

DARPA



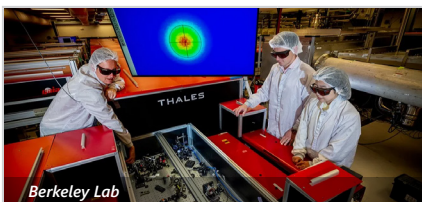
Johns Hopkins APL, Navy Team up to Advance Additive Manufacturing for Critical Missions

Johns Hopkins APL



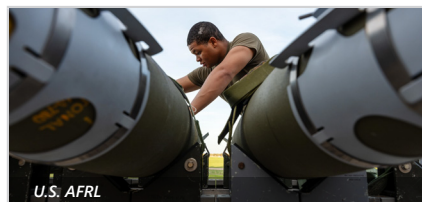
Space Development Agency Completes Successful Launch of T1DES Prototype Satellite

Space Development Agency



Machine Learning Helps Ease the Jitters of High-Power Lasers










Berkeley Lab



Air Force Demonstrates Low-Cost Maritime Defense Capability With QUICKSINK

U.S. Air Force Research Laboratory



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

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