DEFENSE Systems Digest

The Latest From the Defense Systems Information Analysis Center // August 19, 2025

FY25 JAS PROGRAM REVIEW

The Joint Aircraft Survivability Program (JASP) Office will host the 2025 Joint Aircraft Survivability Program Review at the Joint Center for Electromagnetic Readiness at Nellis Air Force Base in Nevada from 16-18 September 2025. The purpose of the review is to facilitate aviation survivability dialogue between the science and technology, acquisition, industry, academia, and operational communities. This will be achieved by presenting a technical overview of the JASP and fiscal year 2025 projects and informing the aviation community of our efforts. This year's event will be held in person and virtually.

Click HERE to learn more.

DID YOU MISS OUR PAST WEBINAR?

"Better, Faster, Cheaper Metallic Components: NSF's HAMMER-ERC"

WATCH NOW!

or download the slides

NOTABLE TECHNICAL INQUIRY

What is the current state of the digital-engineering tool landscape, with a focus on application to the U.S. Department of Defense?

This report surveys the state of the current digital-engineering (DE) tool landscape, with specific emphasis on applications relevant to the U.S. Department of Defense (DoD). The request originated from an inquiry seeking to understand the state of DE tools without disclosing personally identifiable information. The study excludes areas that have been heavily analyzed in prior literature, such as artificial intelligence (AI)/machine learning... **READ MORE**

UPCOMING WEBINAR

Attritable 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 risk. In the 1990s, the military began replacing manned aircraft with unmanned aircraft. Unmanned aerial systems (UASs) remove the risk to human aviators... **READ MORE**


U.S. Air Force

HIGHLIGHT

Air Force Advances Human-Machine Teaming With Autonomous Collaborative Platforms

EGLIN AIR FORCE BASE, Fla. – The U.S. Air Force recently demonstrated a major leap in human-machine teaming, flying autonomous collaborative platforms (ACPs) alongside crewed fighter aircraft during a training event at Eglin Air Force Base, Florida. Pilots operating an F-16C Fighting Falcon and an F-15E Strike Eagle each controlled two XQ-58A Valkyrie aircraft in an air combat training scenario, showcasing real-time integration between... **LEARN MORE**

EVENTS

FY25 JAS Program Review
September 16–18, 2025
Nellis Air Force Base, NV

2025 Advanced Functional Fabrics Summit
September 23–24, 2025
Foxborough, MA

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

Threat Weapons & Effects (TWE) Training 2025
October 28–30, 2025
Eglin Air Force Base, FL

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

VOICE FROM THE COMMUNITY

Joseph Maestas
Weapon Physics Group Leader, Applied Research Associates, Inc. (ARA)

Joseph Maestas leads ARA's Weapon Physics Group, specializing in high-fidelity modeling and simulation, fuzing, and onboard instrumentation for hard target defeat, hypersonic, and maritime target applications. He is an energetics modeling and simulation subject matter expert, with a background in virtual, physics-based analyses for evaluating weapon performance; explosive fill survivability research; lethality methodology development; and model development for nonideal, enhanced blast, and combined effects explosives.

ARE YOU A SME?

If you are a contributing member of the defense 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

- How can someone access the Joint Radio-Frequency Effectiveness Model?
- What are the U.S. Department of Defense standard practices for electromagnetic-interference protection on aerospace vehicles?
- What work is being done with MXene composites (particularly graphene, carbon nanotube, and boron nitride) in national laboratories and in the U.S. Department of Defense?

MORE DSIAC INQUIRIES

EXAMPLE CSIAC & HDIAC TIs

- Can CSIAC provide access to use the Defense Modeling and Simulation Office Master Environment Library?
- How do first-responder teams on a military base use automated drones (machine learning, computer vision, 5G command and control)?
- What are the key emerging and reemerging infectious diseases in west and central Africa?

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.

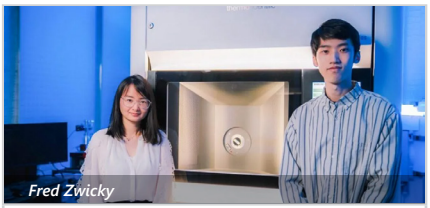
CSIAC INQUIRIES **HDIAC INQUIRIES**

FEATURED NEWS

DoD Adopts Standard for Human Readiness Levels

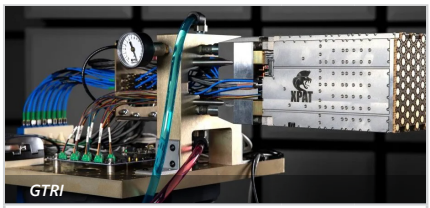
First created by NASA in the 1970s, the Technology Readiness Level (TRL) – which measures the progress of new technology from basic research to completion – was formalized in 1989. TRLs track both commercial and government product development and is common... **READ MORE**

RECENT NEWS



Researchers Capture Nanoparticle Movements to Forge New Materials

University of Illinois Urbana-Champaign



GTRI Develops New Polarization-Diverse X-Band AESA Testbed

Georgia Tech Research Institute

Milestone Sensor Upgrade Enhances Space Force Identifying, Tracking Capability

U.S. Space Force

A New Platform for Developing Advanced Metals at Scale

Massachusetts Institute of Technology

NASA, Johns Hopkins APL Poised to Demonstrate Next-Gen Spacecraft Comms Technology

Johns Hopkins Applied Physics Laboratory

Modernized GPS Operating System Closer to Operational Integration

U.S. Space Force

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

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