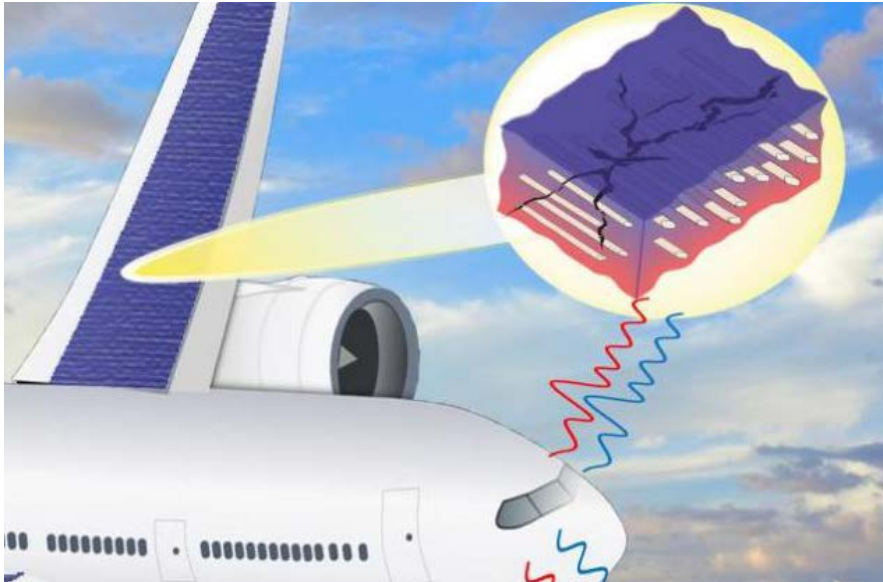


Defense Systems

DIGEST

27 AUGUST 2019 – THE LATEST FROM DEFENSE SYSTEMS INFORMATION ANALYSIS CENTER



NOTABLE TECHNICAL INQUIRY

What is the correlation between impact energy and resulting damage diameter size in composite materials?

DSIAC was asked if there are any equations that correlate impact energy to the resulting damage diameter in a composite material. A DSIAC subject matter expert at Texas Research Institute Austin (TRI Austin) discussed the issue with the inquirer and found a number of references that provide experimentally-based correlations between impact energy and damage... [Read More](#)

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

FEATURED NEWS

Why China Can't Target U.S. Aircraft Carriers

Critics of U.S. aircraft carriers have been arguing for decades that the survival of the world's biggest warships will increasingly be at risk in an era of long-range, precision-guided, anti-ship missiles. In recent years, China has typically been identified as the military power most likely to drive U.S. carriers from the sea.

But the U.S. Navy seems much less worried about carrier attacks than observers who lack military credentials and clearances. In fact, the outgoing Chief of Naval Operations, Admiral John Richardson, told an audience earlier this year that "we're less vulnerable now than we have been since and including World War II."



One reason the Navy is not alarmed is that it has invested heavily in new technologies aimed at bolstering the defenses of carrier strike groups. It also has changed its tactics for operating near China. But the biggest reason for confidence about the future resides in the difficulties China would face in trying to find and track U.S. carriers. [Read More](#)

VOICE FROM THE COMMUNITY



Barney F. Gorin P.E., MBA, Vice President GoVentures, Inc.

I conduct high-level services for spacecraft propulsion and mechanical/electromechanical systems engineering. My current task is systems engineering support to the Robotic Servicing of Geosynchronous Spacecraft (RSGS) project. Most of my experience is in aircraft, spacecraft, robotics, and project management, and my broad experience includes failure analyses. I hold a bachelor's degree in aeronautical engineering

from Tri-State University and master's degrees in aerospace engineering from the University of Notre Dame and business administration from Canisius College.

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UPCOMING EVENTS

2019 JASP Susceptibility Reduction Work Group

4 September 2019 to 5 September 2019

Military Standard 810H (MIL-STD-810H) Testing (Fall 2019)

23 September 2019 to 26 September 2019

Insensitive Munitions & Energetic Materials Technology Symposium (IMEMTS)

21 October 2019 to 24 October 2019

Aircraft Structural Integrity Program (ASIP) Conference

2 December 2019 to 5 December 2019

► Want your event listed here? Let us know!

HIGHLIGHT



Research and Engineering Launches Two New Public Websites

The Office of the Under Secretary of Defense (OUSD) for Research and Engineering (R&E) launched two new websites to provide information on how two of its directorates support OUSD (R&E)'s mission to foster technological dominance across the Department of Defense and ensure the advantage of the American warfighter. [Read More](#)

DSIAC JOURNAL SUMMER 2019



Disposal of Insensitive Munitions

Also in This Issue:

- Computational and Experimental Characterization of an Improvised, Explosively Formed Penetrator
- Investigating Friction Stir Welding in Aluminum Hull Structures
- Additively Manufactured, Solvent-Loaded AP Composite Propellant – Printer Parameter Optimization
- A Multisensor System for Measuring the Light Output and Velocity of Live-Fired, Red Light-Emitting Pyrotechnic Tracers



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

RECENT NEWS



Revolutionary Way to Bend Metals Could Lead to Stronger Military Vehicles



The U.S. Army Is Creating Artillery Rounds Guided by AI



Digital Arsenal: Army Inches Forward on Electronic Warfare



NASA's Orion Spacecraft Has Passed a Critical Propulsion Test



To Prevent Cyber Snooping, the U.S. Navy Is Relying on WWII-Era Communications



Military Researchers See Non-Lethal Role for Talking Lasers



The Corps' JLTV Achieves Initial Operational Capability



New Army Small Arms to Boost Soldier Lethality



DoD Conducts Ground Launch Cruise Missile Test



2019 Mechanical Design Reliability Course

SURVICE Engineering will host the 2019 Mechanical Design Reliability Course in Belcamp, MD, on 15–17 October 2019. The Mechanical Design Reliability Course (MDRC) is a practical application of fundamental mechanical engineering to system and component reliability. This free course covers the theories of mechanical reliability and demonstrates the supporting mathematical theory. For the beginner, the essential tools of reliability analysis are presented and demonstrated. These applications are further solidified by in-class exercises and open discussion. The objective of this extensive application of reliability principles is to leave the participants prepared to address reliability related to mechanical equipment and provide competency in the predominant tools of mechanical system reliability analysis. Course handouts include a student handbook and a System Reliability Toolkit-V.

To learn more and register, visit: <https://www.dsiac.org/events/2019-mechanical-design-reliability-course>.
 For questions, please contact Ned Criscimagna at ncriscimagna@icloud.com.

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