Laser Weapons Show Their Stuff in Real-World Conditions

The 21st Century already has seen more “science fiction” become everyday fact than at any other time in history, from smart phones that make Star Trek’s communicators appear primitive, to the Robonaut — a C3PO-like humanoid robot working on the International Space Station — to perhaps the most iconic of all: laser weapons. Directed-energy weapons (DEWs) have been a staple of future warfare depictions since H.G. Wells published “War of the Worlds,” with its Martian “heat rays,” 120 years ago. Hughes Aircraft engineer and physicist Theodore Harold Maimain generally is credited with inventing the... Read More

NOTABLE TECHNICAL INQUIRY

How can an existing infrared (IR) marker/crayon technology and production facilities be improved for manufacturability?

DSIAC was asked to assess IR marker/crayon technology in order to improve the product design for manufacturability and production facilities. DSIAC subject matter experts (SMEs) from the Georgia Tech Research Institute (GTRI) produced a statement of work with... Read More

MODEL OF THE MONTH

ALARM – The Advanced Low Altitude Radar Model, or ALARM, is a generic digital computer simulation designed to evaluate the performance of a ground-based radar system attempting to detect low-altitude aircraft. The purpose of ALARM is to provide a radar analyst with a software simulation tool to evaluate the detection performance of a ground-based radar system against the target of interest in a realistic environment.

Get this model!

SUBMIT YOUR TECHNICAL INQUIRY – 4 hours of research service for FREE
VOICE FROM THE COMMUNITY

Allan Hill, Lockheed Martin Missiles & Fire Control (LM MFC), Distinguished Member, Group Technical Staff

I am currently the LM MFC subject matter expert for reliability engineering and supportable low observables as well as the Logistics and Sustainment Engineering Department design assurance expert. I ensure design integrity from a reliability, availability and maintainability (RAM) and logistics perspective for all MFC programs, help resolve technical issues, and am currently developing knowledge continuity training for reliability engineers. One of the things I enjoy most is collaborating with our various programs to solve problems and advance the state-of-the-art in reliability engineering.

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

UPCOMING EVENTS

Defense Maintenance and Logistics Exhibition
17 December 2018 to 19 December 2018

29th AAS/AIAA Space Flight Mechanics Meeting
13 January 2019 to 17 January 2019

Joint Conference on T&E Support to Prototyping and Experimentation
15 January 2019 to 17 January 2019

2019 Military Aviation Systems Summit
16 January 2019 to 17 January 2019

Want your event listed here? Let us know!

BULLETIN BOARD

The Advanced Joint Effectiveness Model (AJEM): Latest Version 2.55 is released and available for download.

2018 JMUM Proceedings Volume I (Unclassified Proceedings) and Volume II (Classified Proceedings) are available for download from the DTIC R&E Gateway.

Never Forget: Celebrating Those Who Served

The Joint Aircraft Survivability Program (JASP) is soliciting project proposals for their FY20 program.

Have an idea for a topic? Please contact us to write an article!
Genetically Engineered Virus Spins Gold Into Beads

Inspired by Nature: Design for New Electrode Could Boost Supercapacitors’ Performance

Microsoft Now Lets You Build Your Own Drone App

Don’t Dumb Down U.S. Army Next Gen Radar

After Laser Attacks, Pentagon Spending $200M to Protect Pilots

Could This Non-Lethal Round Replace Tasers for Marines?


Army, Arizona State University Team on New Alloy With Superhero-Like Strength

Long Range, Short Term – Improving Army Precision Fires
Advanced Resins Are Revolutionizing the Way We Repair Aircraft

Aircraft design has progressed rapidly over the last 110 years. The simple wooden planes that were used mostly as scouts in World War I gave way to the riveted metal bombers and fighter planes of World War II. By the 1980s, computer-aided design and manufacturing revolutionized the entire process. Today, innovative new composite materials are replacing steel, titanium, and aluminum in a wide array of aerospace components from access panels to fuselages. Composites have improved strength-to-weight ratios, excellent resistance to corrosion, and the potential for quick and expedient repairs. The current two-component, thermally-accelerated resins used in composite repair add many steps to the repair process that make them inefficient and costly to use on aerospace structures. Switching to an ambient temperature cure, one-part resin can greatly streamline aircraft repairs, saving money and man-hours and significantly increasing weapon system readiness. Read More.