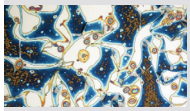
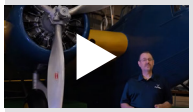
DIGITAL MEDIA SPOTLIGHT

AFOSR Art of Science Showcase



The Air Force Office of Scientific Research is preparing for its second annual Art of Science showcase. Prepare to submit your basic research inspired artwork when applications open on Sunday, Aug. 6. Take a look at last year's gallery to get inspired. **Read More**

AFRL Tech Museum Series



Explore AFRL's rich history through the various technologies showcased at the National Museum of the United States Air Force in this YouTube series. Subscribe to our channel to get notified when new episodes are released this fall. **Watch Here**

AFRL Lab Life - Episode 19: Man On The Moon

Astronaut, geologist, and the most recent living man to have walked on the moon, Dr. Harrison "Jack" Schmitt, joins us to speak on the Apollo 17 mission, geology and the future of space travel. **Listen Here**

AFRL

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TOP NEWS STORY

AFRL WELCOMES NEW COMMANDER

WPAFB, OH — Brig. Gen. Scott A. Cain assumed command of the Air Force Research Laboratory, or AFRL, during a change of command ceremony hosted by Gen. Duke Z. Richardson, commander, Air Force Materiel Command, June 5, 2023, at the National Museum of the U.S Air Force. Richardson expressed his gratitude to Maj. Gen. Heather L. Pringle for her impressive work as AFRL commander. In the search for Cain, officials looked for someone equally as impressive to take AFRL even further. Cain, who came from a position as the director of Air, Space and Cyberspace Operations at Headquarters, Air Force Materiel Command, was chosen to be the 13th commander of AFRL. "You're inheriting a phenomenal team [of] remarkable professionals," Richardson said. "My charge to you is to lead and take care of them, and they will take care of you. Your challenge is to take the baton and continue running with it." Cain said he was thankful for the opportunity to lead AFRL. "It truly is a dream job, and I appreciate the confidence in 'team Cain' moving forward onto this challenge," Cain said. Pringle assured Cain that AFRL is ready for his guidance and leadership. **Full Story**

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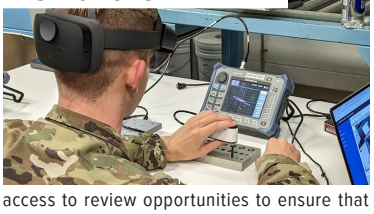
PEOPLE OF AFRL

Dr. Kerianne Hobbs, with the Air Force Research Laboratory, or AFRL, was the lead author of a 38-page spread in the Institute of Electrical and Electronics Engineers, or IEEE, Control Systems Magazine, titled Runtime assurance for safety-critical systems: An introduction to safety filtering approaches for complex control systems. Hobbs worked on several autonomy programs at AFRL since 2011 and has been exposed to working with various systems, such as automated air refueling; Auto GCAS; and Automatic Air Collision Avoidance System, or Auto ACAS, which led to her current position as the safe autonomy and space lead with the Autonomy Capability Team, or ACT3, for the Sensors Directorate at AFRL. **Read More**

AFRL LEADS USSF CONTINUOUS FITNESS ASSESSMENT STUDY

WPAFB, OH – The Air Force Research Laboratory, or AFRL, is conducting a two-year voluntary study with Guardians to assess the use of wearable fitness devices that measure physical activity. The study, which began enrollment in May 2023, is part of the U.S. Space Force's Continuous Fitness Assessment, or CFA, line of effort. "This study will explore the usability, reliability and effectiveness of these devices while incorporating feedback from Guardians," said Dr. James Christensen, a product line lead with AFRL's 711th Human Performance Wing. "The results will inform leaders about the role of wearable devices in proposed fitness strategies that may replace annual tests. All uniformed Guardians are eligible for the study and participation is optional." In May 2023, Guardians received an email invitation to join the study. Those who enroll and remain active in the study will be exempt from U.S. Air Force physical fitness assessments. Following the initial announcement, the AFRL study team hosted information sessions at Wright-Patterson Air Force Base, Ohio for Guardians who pre-enrolled in the study. Study team members briefed Guardians on participation guidelines, answered questions and issued Garmin watches, the approved study device. Virtual info sessions will be hosted in the coming weeks along with three in-person sessions near Peterson and Schriever Space Force bases in Colorado, July 18-21, 2023. **Full Story**

AFRL DEMONSTRATES NEW AUGMENTED REALITY CAPABILITY TO IMPROVE DAF NONDESTRUCTIVE INSPECTIONS



WPAFB, OH — The Air Force Research Laboratory, or AFRL, has developed an augmented reality capability to assist in accomplishing nondestructive inspections, or NDI, for safety critical applications in military aircraft. Research engineers in AFRL's Materials and Manufacturing Directorate designed the Augmented Reality for Nondestructive Evaluation, or ARNE, system to help aircraft technicians detect fatigue cracks between metal aircraft layers using a bolt hole eddy current, or BHEC, procedure, contributing to airworthiness and improved fleet readiness for the U.S. Department of the Air Force. "ARNE meets a crucial need for nondestructive inspection methods by providing hands-on refresher coaching for our NDI technicians out in the field," said 1st Lt. Svanna Perseghetti, nondestructive research engineer, AFRL's Materials and Manufacturing Directorate. "Our aircraft maintainers and technicians are already fully trained and fully certified, but everyone benefits when they have access to review opportunities to ensure that they can practically apply what they learn." ARNE utilizes augmented reality, or AR, a technology that superimposes a computer-generated image onto a user's view of the real world. The system projects relevant three-dimensional hologram images onto physical aircraft parts and virtually "walks" technicians through the process of performing a BHEC procedure, a critical aircraft safety inspection used to detect the presence of fatigue cracks in DAF fleets, said Dr. Eric Lindgren, nondestructive technology lead, AFRL's Materials and Manufacturing Directorate. **Full Story**

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