



ASSOCIATION OF OLD CROWS ADVOCACY NEWSLETTER

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AOC Launching Two New Podcasts

by Ken Miller, AOC Director of Advocacy and Outreach

AOC is launching two new podcasts to bring our community together. Stakeholders and professionals across government, industry, and academia, not to mention the self-described technologist, can learn our history and engage on topics of the day.



The first podcast, *From the Crows' Nest*, will be a regularly scheduled podcast that will feature interviews, analysis, and discussions covering leading issues of the day related to EMSO. Topics include current events worldwide, US Congress, the annual defense budget, and military news from the US and allied countries. This podcast will bring you closer to AOC events and provide a forum to dive deeper into policy issues impacting the EMSO community. The first episode of *From the Crows' Nest* will be released on April 14, but you can go now to crows.org/podcast to listen to the trailer and subscribe!



The second podcast, *The History of Crows*, will cover the history behind the inventors, the battles, and the technology that have shaped our military operations and how we fight. *The History of Crows* will cover the most important discoveries, battles, and events that shaped what we know today as EMSO.

HASC CITIS Subcommittee Holds Hearing on EMSO

by Tala Alshaboot, Research Assistant, Advocacy and Outreach

On March 19, the House Armed Services Subcommittee on Cyber, Innovative Technologies, and Information Systems (CITIS) convened a hearing on the “Department of Defense Electromagnetic Spectrum Operations: Challenges and Opportunities in the Invisible Battlespace.” The witnesses included Mr. Bryan Clark, Senior Fellow at the Hudson Institute, Dr. Joseph Kirschbaum, Director of Defense Capabilities and Management at the Government Accountability Office (GAO), and Dr. Bill Conley, Chief Technology Officer at Mercury Systems, and former Director of EW in OSD. The hearing focused on how the electromagnetic spectrum (EMS) is a powerful tool that should expand knowledge, increase prosperity, and enrich

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the human experience. Dr. Kirschbaum highlighted that the Defense Department (DOD) is dependent on EMS across all warfighting domains, including air, land, seas, space, and cyberspace. One of the issues that he brought up was that adversaries and peer competitors to the US and its coalition partners have significantly incorporated EMS technologies to use against the US. There have been recent cases in the field that speak to this. Russia has conducted electronic attacks against US coalition forces in Syria. In 2018, US Special operations command head Gen. Raymond Thomas called it “the most aggressive electronic warfare environment on the planet from our adversaries.”

Congress and the DOD have made significant efforts recently to equip the US military for success. The efforts have been mapped out, the strategy and goal are clear, but the spectrum has become congested and constrained. US forces compete with adversaries as well as neutral parties for access and control. The interruption of US forces’ access to EMS and US adversaries’ spectrum development results in disadvantages and the interruption of force operations. Bryan Clark called the spectrum the “forgotten domain” because “although we experience the EMS every day through our smartphones, mobile computers, or vehicle collision avoidance systems, the spectrum cannot be seen or felt like land and cyberspace.” Despite its invisibility, access to the electromagnetic spectrum is critical for US forces. Without it, we would not be able to do the combined arms warfare as we have over the last century. Mr. Clark agreed that China and Russia had been aggressively pursuing mechanisms to deny the spectrum to US forces to take apart the ability of the battle networks US military uses to conduct US operations. He also noted that given the current timeframe the US is working with, there is less than a decade left to deter China. So the US will need to mount a different kind of effort to use other operational concepts and various technologies to get EMS advantage. In comparing the Gross Domestic Products (GDP) and defense spending between the US and China, Dr. Conley found that “China’s GDP is 10% larger than the US, but their RND spending is only 80% that of the US, and their military spending is only 60% of the US spending.” He expects that this will not be the case for long because their economy is growing, and their spending will significantly increase accordingly. Mr. Conley pointed out that the most important strategic offensive the US should invest in is, increasing commanders’ ability to maneuver their EMS forces. He foresees that the sooner this gets done, the more the US will stay ahead.

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Business Opportunities

Rapid Reaction Technology Office Conducting Virtual Solutions Meeting

The Department of Defense's (DOD) Rapid Reaction Technology Office (RRTO) is conducting a Virtual Solutions Meeting in Fall 2021. This meeting will provide a select few innovative companies the opportunity to present their new technologies to government representatives. The selected companies will get the chance to further develop their research into prototypes and experimentation. The RRTO is focused on never seen technologies that can provide an advantage against the US' near-peer adversaries evolving technologies. The 2021 Global Needs Statement specifies that the "Solutions are expected to derive from companies' internal research and development (IR&D) or other research efforts and suitable for maturation through DOD prototyping funding, but not mature enough to be Commercial Off-the-Shelf products." To be considered, companies need to show that they are the Technology Readiness Level (TRL) 3 or TRL 4, which is the laboratory validation stage. The DOD is currently focused on Artificial Intelligence, Cyber, 5G, Disruptive Technologies, Fully Networked Command, Communication, and Control (FNC3), and other similarly relevant areas. Companies interested in participating in the Solutions Meeting should submit one (1) application to RRTO Innovation via e-mail to osd.pentagon.ousd-atl.mbx.rrto-innovation@mail.mil. no later than 5:00 pm EDT, 21, April 2021.

U.S. Army Planning EW Support Contract

On March 5, the U.S. Air Force released a Request for Information (RFI) to inform the establishment of a new capability development pipeline for integration on current and Next-Generation (Next-Gen) Multi-Role Unmanned Aerial System (UAS) Family of Systems (FoS) with reduced operating costs and greater persistence, survivability, and range. These Next-Gen Multi-Role UAS FoS may comprise attributable, expendable, survivable, and reusable attributes, which can attain desired effects in various operating environments. Specifically, Future Next-Gen Multi-Role UAS FoS technologies must hold a different role than they do today and address capabilities beyond traditional UAS mission sets, such as air-to-air, two base defense, electronic warfare, moving target indicator (air and ground) capabilities, and be designed for native integration into JADC2. The plan for this approach includes investment in military-specific systems, as well as the commercial market. Bloomberg Government estimates this opportunity to be up to \$100 million. Pre-RFP responses are due April 9, 2021.

U.S. Army Looks to Enhance Soldier Survivability

The U.S. Army is looking to expand innovative technologies to enhance soldier survivability for an upcoming virtual demonstration and experimentation event in April. Thunderstorm Technology Demonstration and Experimentation 20-3 will give companies, government research organizations, and academic institutions opportunities to showcase

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new technology in a variety of areas. These areas include training support technologies through augmented reality, sensors and situational awareness, soldier and personal protective equipment, soldier and material signature management, and identification friend or foe (IFF) solution. This two-day virtual event in April is led by the DOD's Rapid Reaction Technology Office and the Georgia Tech Research Institute with support from the Applied Research Laboratory at Pennsylvania State University and other DOD partners. While no funds have been allocated for the initiative at this time, Bloomberg Government predicted that contracts over \$100 million are possible if the Army adopts any demonstrated technologies.

E-8C JSTARS Programmed Depot Maintenance (PDM) Announcement

The Command-and-Control Intelligence, Surveillance and Reconnaissance (C2ISR) Division is hosting an Industry Day on April 6, obtaining feedback from interested industry representatives regarding an initiative by the JSTARS Branch to acquire market research. This market research will help identify potential sources that possess the expertise and capabilities to meet the requirements to provide services needed to support the Air Forces' JSTARS and provide feedback from the industry. The draft RFP was created to establish "a single award Indefinite Delivery, Indefinite Quantity (IDIQ) contract to provide depot maintenance for the JSTARS E-8C weapon system and E-8A In-Flight Trainer (IFT) with the goal of on-time, defect-free, and cost-effective aircraft delivery meeting warfighter requirements for a safe, reliable, and mission-ready aircraft ultimately increasing aircraft availability." Collaboration is welcomed with industry partners through reviewing technical requirements and the discussion of mutual issues first.

For questions, comments, or additional information on any of the above topics, please contact Ken Miller, AOC Director of Advocacy and Outreach, at kmiller@crows.org or Tala Alshaboot, Research Assistant, Advocacy and Outreach at tala@crows.org.
