

# EW Asia 2020

## Vacuum Electronic Devices (VEDs):

Innovation to Power Advanced  
Electronics

Panel Discussion



ASSOCIATION  
OF OLD CROWS



# Introduction

- Technological innovations for higher power in smaller systems combined with millimeter wave devices are in high demand.
- Defense and industry leaders must rethink outdated and disproven assumptions that discourage innovation.
- Pursuit of EMS Superiority is underpinned by the reliability and efficiency of component technology.
  - Industrial capacity
  - Supply chain infrastructure
  - Intellectual capital
  - Investment / Innovation
- We need a “best of technologies” approach to mitigate risk and provide insurance against failure (or delays) in development & fielding of systems.

# Overview

- Moderator
  - **Ken Miller**, Director of Advocacy and Outreach, Association of Old Crows (AOC)
- Panelists
  - **Mr. Malcom Carruthers**, Vice President, Power and Microwaves, Photonis Defense
  - **Colonel Eric Shafa**, US Air Force, CSAF Chair and Assistant Professor, the Dwight D. Eisenhower School for National Security and Resource Strategy, National Defense University
  - **Mr. Chuck Blank**, Director, Business Development for Aeronautics, Terma North America, Inc.

# Panel Discussion Takeaways

- To properly identify new threats and determine requirements of future EW systems is to look and listen to our peer competitors.
- We must pursue policies that strengthen an increasingly complex defense industrial base supply chain.
- The diminishing appetite for investment in VEDs and other component technologies is more about culture, understanding, expertise than resources and performance.
- We must examine competing priorities to better understand how capitalize on incentives and investment that will spur innovation
- DoD cannot discount investment in advanced technologies, including VEDs, knowing what our peer competitors are pursuing to leverage our vulnerabilities.
- We need a “best of technologies” approach to mitigate risk and provide insurance against failure (or delays) in development & fielding of systems.
- Challenges of a complex EMS environment in the Asia/Pacific region call for investment in systems and capabilities to provide better jamming, self-protection, and reduce pilot task saturation.

**More information on AOC Advocacy & IPPs:**

**<https://www.crows.org/advocacy>**

**Mr. Ken Miller  
Director, Advocacy & Outreach  
Association of Old Crows  
1555 King Street  
Alexandria, VA 22314 USA  
[kmiller@crows.org](mailto:kmiller@crows.org)  
703-549-1600 (o)**