

C-UAS Symposium Oklahoma State University



Symposium Theme: C-UAS: Getting Our Arms around the Problem

AGENDA – Current as of July 7, 2017

Tuesday, 15 August 2017

0800 Introduction

- Welcome [OSU]
- Defining the threat: **[John Coglianese¹]**
 - Understanding the problem; Evolution of the Threat
 - Abroad and Homeland;
 - Speed of Change
 - Layout of Symposium Content

0900 Homeland Defense Perspective

- Unique Issues facing the defense of US Capitol **[Robert Campbell², DC Capitol Police]**
- Federal Law Enforcement [tentative]

1015 Break

1030 DoD Perspective

- Army FCOE, MFIK experience **[John Haithcock Jr.³ CIV USARMY FCOE]**
- Air Force Operational T&E **[Chris Mitchell⁴, GS-12 USAF AFOTEC USAF/CS]**
- JIDO [tentative?]

1230 Lunch

1330 UAS Threat Technology [**Zach Barbeau**⁵]

- Current in-field technology
 - Aero platform
 - Comms
 - Payload/munitions
- Evolution of Threats
- Expected Future Threats

1415 C-UAS Technology [**Conrad Smith**⁶]

- Current fielded technology
 - Detect and Identify: RF, Acoustic, Visual, Animal
 - Defeat: RF, Kinetic, Cyber
- Current research & Development
 - Detect and Identify: RF, Acoustic, Visual, Animal
 - Defeat: RF, Kinetic, Cyber

1500 Break

1515 Panel Discussion

Discussion [Suggested]

How can DoD and Industry facilitate a more accelerated pace to development and T&E?

1700 End

Wednesday, 16 August 2017

0800 Meet at OSU's Unmanned Aerial Flight Station [UAFS]

0830 **Demonstration:**

A brief hands-on **flight demonstration** will be conducted at OSU's UAS facility. The goal is to demonstrate relevant small UAS asymmetric capability and emphasize threat resiliency with respect to common C-UAS capability.

- Simplicity and expeditionary effectiveness of procedures required to conduct fixed wing missions that can only be downed via GPS jamming or kinetic means
- Timeline for detection, (track), ID, defeat
- Potential future, high speed low cost threats

1000 Discussion

1100 Break up



Speaker Bio's

¹John Coglianesse, (US Marines, LtCol Ret.)

John Coglianesse is a retired Marine Intelligence Officer with 26 yrs of service. Some of those duties included Battalion and Regimental Intelligence Officer, Inter-agency Task Force J2 (Intelligence), Collections Officer- Special Operations Command, US Central Command, Combined Forces Special Operations Command, US Central Command, and Collections Officer for Combined Joint Task Force. He was also an instructor at the Marine Corps Intelligence School. He served in uniform as well as a government civilian for USSOCOM as Program Manager, Special Applications for Contingency and Director, Unmanned Aerial Systems.

John is presently performing strategic consulting to clients and portfolio companies in the commercial and DoD markets primarily focused on UAS, Intelligence and Communications related applications as well as advising with Private Equity / Venture Capital firms to provide subject matter expertise in specific concentration areas.

²Robert Campbell, DC Capitol Police

Sergeant Rob Campbell is the Airspace Security Coordinator for the United States Capitol Police in Washington, D.C.; he serves as the agencies direct airspace liaison to the U.S. Congress and Senior Law Enforcement officials in the Legislative Branch of Government. Sgt. Campbell manages all U.S. Capitol Police daily operations at the National Capital Region Coordination Center and serves on multiple Interagency Un-manned Aircraft System (UAS) Working Groups in the National Capital Region. Sgt. Campbell created the FAA adopted acronym "D.R.O.N.E" that is used as a reference guideline for Law Enforcement when interacting with UAS; he has also developed three (3) UAS specific Law Enforcement "Outreach" documents that have been shared with Law Enforcement agencies across the National Airspace System. Sgt. Campbell began his Law Enforcement career in 2005 after 12 years of Military Service in the Navy, Army, and Air Force and has been serving in his current position since 2012.

³John Haithcock CIV USARMY FCOE

Representative of US Army's Fire Center of Excellence, Ft. Sill, OK – Sponsor of Maneuvers and Fires Integration Experiment (MFIEX)

⁵Zach Barbeau



Zach Barbeau is a Research Engineer that has spent the last year and a half leading Oklahoma State's C-UAS analysis and red team support of several DoD C-UAS events including US Army Fires Center of Excellence Maneuver and Fires Integration Experiment (MFI), US Army Asymmetric Warfare Group Desert Chance, Joint Staff J6 Bold Quest, and US Army Counter, Rocket, Artillery, Mortar (C-RAM) engineering tests. He received his M.S. in Mechanical and Aerospace Engineering in July 2017 specializing in Unmanned Aircraft Systems. He is currently on Intergovernmental Personnel Act (IPA) assignment to United States Special Operations Command serving as a UAS SME within Airborne ISR.