

Christopher Todd, CEM

Executive Director, AIRT (Airborne International Response Team)

COMPETITIVE DIVISION – GRADUATE STUDENT

An Integrated Framework for Counter-Uncrewed Aircraft Systems (C-UAS)

Implementation to Protect the Homeland

Data clearly illustrates that the use of small drones for nefarious purposes is increasing dramatically on a global basis. As the proliferation of unmanned aircraft systems (UAS) operating in the U.S. National Airspace System (NAS) accelerates, the ability to detect, intercept, and mitigate potential UAS threats remains challenging, if not elusive.

The authority to undertake counter-UAS (C-UAS) action presently rests exclusively with four Federal departments; the Department of Defense (DoD), the Department of Energy (DoE), the Department of Homeland Security (DHS), and the Department of Justice (DoJ).

An array of potential C-UAS capabilities is emerging in the marketplace, yet many questions remain surrounding the legality and viability of these proposed solutions.

To defend against intrusion and possible attack, State, Local, Territorial, and Tribal (SLTT) partners, as well as owners and operators of critical infrastructure and other High-Value Targets (HVTs), must possess both the authority and capability to deploy appropriate and effective drone countermeasures when necessary.

Legislatures, regulators, and industry are all mobilizing for action, but will it be enough to avoid a significant “Gray Rhino” incident involving one or more small drones against critical infrastructure or HVTs?

This presentation will examine the current C-UAS landscape and propose a conceptual framework to successfully integrate safe and effective capabilities and legal authorities for use by stakeholders to protect the NAS and homeland.

Presentation Theme: An Integrated Framework for Counter-Uncrewed Aircraft Systems (C-UAS) Implementation to Protect the Homeland.

Collaborators, Advisor(s) and Department(s) that assisted with this research: Jeffrey Stern, Ph.D., CEM®

Adjunct Professor

Georgetown University

JB Cuartas, CEM®

Adjunct Professor

Georgetown University

Tim Frazier, Ph.D.

Program Director, Professor

Georgetown University