



# LEADING THE INDUSTRY IN PUBLIC SAFETY AND UNMANNED AIRCRAFT SYSTEMS (UAS)



## UAS TECHNOLOGY AND INTEGRATION

Over the last few years police forces across the country have worked through numerous challenges in their mission to integrate both **UAS** and **body-worn cameras (BWCs)** into their operations and procedures. As the training and technical assistance provider to more than 250 law enforcement agencies, CNA has developed deep understanding of the complexities and challenges involved in implementing a new technology in local policing; many of these challenges are relevant to UAS use. In addition, CNA's Institute for Public Research (IPR) has designed, executed, and evaluated more than **350 homeland security exercises** since 1999, which have included participants ranging from local first responders to the president of the United States.

CNA leads the database development and data collection for the ASSUREd Safe project to capture training and evaluation metrics for first responders with **UAS standards, education, training, certification, testing, and credentialing** to assess first responder proficiency in UAS

operations. The ASSUREd Safe project focused on improving communications and how to better integrate UAS into Disaster Preparation and Recovery with government agencies such as FAA, NIST, and Federal Emergency Management Agency (FEMA). CNA supports UAS training and credentialing services for first responders operations to cover federal, state, local, tribal and territories needs.

CNA builds **custom models and simulations** to provide quantitative insights into challenging questions for aviation. We developed UAS Cooperative Airspace Traffic Simulation (UCATS™), an agent-based modeling tool that simulates UAS flight planning in various package delivery scenarios to provide insights into airspace fairness for industry and government stakeholders.

## UAS CONCEPTS AND WORKSHOPS

Public safety organizations have begun to realize the value of UAS; however, the regulatory environment can become a barrier too great to overcome. Workshops provide a unique opportunity to bridge the gap and gather diverse stakeholders and tackle problems that can best be solved by the community. In its workshops, CNA's expert designers, facilitators, and evaluators will ensure that state, local, tribal, and territorial (SLTT) goals and objectives are clearly stated, and that the workshop drives participants towards the outline of a **UAS integration Concept of Operations (CONOPS)** that covers the jurisdiction as a whole. Using realistic and plausible scenarios, a facilitator leads participants through a series of questions and challenges that will generate ideas about how UAS might be used by SLTT stakeholders both during day-to-day operations and during a disaster response.



CNA, partnered with RIIS, LLC is a 2022 Winner for the **NIST Challenge 3.3: Shields Up! Securing Public Safety UAS Navigation and Control** and a **Stage 2.2 Winner of the First Responders' Indoor Challenge** hosted by NIST's Public Safety Communication Research (PSCR) division.

Dedicated to the Safety and Security of the Nation

## UAS REGULATIONS AND STANDARDS

CNA brings expertise in UAS federal regulation, memoranda of understanding and/or agreement with partner law enforcement agencies, and review of state and local legislations. This regulation experience supports CNA's provision of training and materials that informs officers of federal, state, and local laws that may apply. In addition, CNA works with jurisdictions to develop UAS-response guidelines that are specific to them. CNA delivers the type of training that is best suited to a department's needs (e.g., in person, virtual, self-led) providing a versatile approach to mission success.



## ABOUT CNA

CNA is a nonprofit research and analysis organization dedicated to the safety and security of the nation. It operates the Institute for Public Research — which serves civilian government agencies — and the Center for Naval Analyses, the Department of the Navy's federally funded research and development center (FFRDC). CNA develops actionable solutions to complex problems of national importance. With nearly 700 scientists, analysts and professional staff, CNA takes a real-world approach to gathering data, working side-by-side with operators and decision-makers around the world. CNA's research portfolio includes global security and strategic competition, homeland security, emergency management, criminal justice, public health, data management, systems analysis, naval operations and fleet and operational readiness.

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