



DRONE TRAINING FOR FORENSIC PROFESSIONALS MASTERCLASS

Your Complete Drone Training
Source For Forensic Professionals





Drone Training for Forensics Professionals Masterclass

Overview

When it comes to forensics, law enforcement and public safety, drones have emerged as a valuable new tool. Not only are they able to carry out complex surveillance missions that would be dangerous or impossible for human officers to complete, but they can also help to save lives by providing important information in emergency situations. As such, police and public safety departments throughout the US have begun incorporating drones into their operations. To ensure that these agencies can safely and effectively use this emerging technology, we have developed a training program specifically for forensic professionals. This program focusses on teaching crime scene investigators how to effectively fly drones and use this capability to recreate accident and crime scene imagery.

Day 1 (8 hours)

Basics Of Flight

Course objective: Teach students in the class the basics of how UAVs operate with some layered lessons around operating safely in the National Airspace

Course Includes:

- help students understand how a drone flies and flight dynamics
- learn how to be an effective visual observer
- illustrate the basic skills needed to work as an effective UAV pilot
- implement solid aeronautical principles and safety practices from the beginning
- introduce students to some FAA Part 107 and COA requirements
- build confidence in their individual ability to fly
- 2-3 hours of classroom work and 5-6 hours of outdoor flying

Day 2 (8 hours)

Mastering Outdoor Flight

Course objective: Students will build their experience and level up their flight skills while building muscle memory to become proficient fliers. Students will maneuver through several training exercises designed to challenge the pilot.

Course includes:

- how weather conditions and aeronautical limits impact your drone's capabilities
- learn the difference between managed flight and true flight
- what factors and hazards impede flight



Students will experience training scenarios designed to enhance individual skills and build operational confidence.

This course includes elements from the Standard Testing Methods for Small Unmanned Aircraft Systems Proficiency Evaluation for Remote Pilots By (NIST) Open-air and Obstructed Tests and Scenarios.*

Days 3, 4, and 5 (24 hours)

2D and 3D Orthomosaic Mapping Using Drones

Course objective: Students will experience both classroom instruction and outdoor training designed to get them accustomed to operating a drone to collect photographic evidence and recreate both 2D and 3D images using Pix4D.

Course includes:

- learning the Pix4D Mapper program and scene processing techniques
- flight planning and image capture using Pix4D Capture app and drones
- understand how to use Ground Control Points and polyline measurement to address scene orientation and scaling constraints that will arise
- create and edit orthomosaic images
- scan and process two to three simulated scenes
- generate an output report for demonstrated accuracy



Total training hours: 40

Requirements for Students to Enroll

- Must have obtained their FAA Part 107 license



- Completed their FAA Part 107 prep course
- Provide a copy of their enrollment into a Part 107 prep course
- Written verification that the student's department operates under a valid FAA COA Waiver

Equipment Requirements for Students

- Students must bring a laptop with the required amount of RAM to perform the orthomosaic image lab work – [click here to read more about the requirements](#)
- Students must bring the drone they are familiar flying with the Pix4D Capture app installed on the controller
- Students will receive a full and open trial version of the Pix4D Mapper software

About Aerial Recon Training

Our instructors are retired or transitioned Navy SEALs, who are the best-trained operators in the world, and members of the law enforcement community. Periodically, we have other FAA Part 107 veteran trainers lead our courses.

The class size maximum is 20 students, and the cost is \$779 per student for the five-day course.

Training will be held at **The Drone Farm** in Wakefield, VA a large scale drone range with 144 acres of land use. The facility is located in Class G airspace with minimal airspace restrictions, permitting students to operate at the maximum 400' allowed ceiling when necessary.

The facility is approximately 45 minutes from Richmond International Airport and 60 minutes from Norfolk International Airport. The town supports reasonable accommodations in the area.

It is our position that we are not here to tell students in law enforcement how to do their job. We provide an exchange of information designed to help them expand their skill set and build the necessary confidence to perform at peak effectiveness.

Students will receive pre-course directions that include a list of what they will be required to bring, a guide to area accommodations, and directions to the training arena.

We ask students to bring a drone in the fleet they are most comfortable flying (they will require an overview of flight operation by the student's UAV coordinator). If the student is unable to bring a drone or has never flown before, we will provide one and a run-down of how to operate it for the flight training classes. If a student does not have a drone they will be paired with a student who does and will work with that team to



reconstruct the simulated scenes. We will not be providing every student with drones capable of capturing scene images, but every student will be able to render the various simulated scenes into a final orthomosaic image.

Accommodations

Hampton Inn & Suites Smithfield
200 Vincent's Xing, Smithfield, VA 23430
(757) 365-4760
<https://bit.ly/3QLppMk>

Econo Lodge Inn & Suites Carrollton – Smithfield
20080 Brewers Neck Blvd, Carrollton, VA 23314
(757) 542-3092
<https://bit.ly/3tToGyP>