

Aerial Drone Inspections Workshop

DARTDRONES



Drones provide a safe and effective method to gather high-definition imagery of roofs, structures, infrastructure, and other areas where damage can occur. Learn how to gather and analyze data to advance your inspections career.

PREREQUISITES

5+ Hours of Flight Time

Not flying drones yet? Check out our drone pilot training courses at dartdrones.com.

Part 107 Certificate

Not FAA Certified to Fly Commercially yet? Check out our in-person or online Part 107 Test Prep courses.

WORKSHOP SCHEDULE

DAY 1

8:30AM - 5:00PM

Aerial Inspection with sUAS Basics

Lesson 1: Use Cases for Aerial Inspections
Lesson 2: Intro to Aerial Inspections with sUAS
Lesson 3: Aerial Inspection Techniques

FLIGHT SESSION 1:
Manual Inspection Profiles

Lesson 4: Capturing Quality Imagery
Lesson 5: Managing Drone Emergencies

FLIGHT SESSION 2:
Camera Optimization/Emergencies

DAY 2

8:30AM - 5:00PM

Advanced Operations

Lesson 6: Preflight Planning
Lesson 7: On-Site Assessment
Lesson 8: Crew Coordination
Lesson 9: Mapping & Modeling for Aerial Inspection

FLIGHT SESSION 3:
Mapping and Modeling

Lesson 10: Intro to Thermal Imaging

FLIGHT SESSION 4:
Thermal Imaging Demonstration

Lesson 11: Using What You've Learned

AERIAL DRONE INSPECTIONS WORKSHOP CURRICULUM

LESSON 1

Use Cases for Aerial Drone Inspections

- Post Natural Disaster
- Scheduled commercial construction inspections and monitoring
- Insurance inspections
- Home and roof inspections
- Chimney and steeple inspections
- Utility inspections
- Water system inspections
- Solar farm inspections
- Wind farm inspections
- Railroad inspections
- Bridge inspections
- Home and roof inspections

LESSON 2

Intro to Aerial Roof Inspection

- Industry Uses
- Platform Considerations
- Payload Considerations

LESSON 3

Aerial Roof Inspection Techniques

- Types of Imagery Products
- Areas of Focus
- Manual Flight Profiles
- Common Manual Shots
- Determining the Shot List
- Sample Shot Lists

LESSON 4

Capturing Quality Imagery

- Environmental Impacts
- Image Framing
- Common Camera Settings and Speciality Camera Settings

LESSON 5

Managing Drone Emergencies

- Flight Hazards Around Structures
- Common Drone Emergencies
- Recommended Emergency Responses

LESSON 6

Preflight Planning

- Utilizing Preflight Checklists
- Determining Airspace Requirements
- Evaluating Forecast Weather
- Performing a Site Evaluation
- Verifying Waiver Requirements
- Checking State & Local Regulations

LESSON 7

On-Site Assessment

- On-Site Assessment Checklist
- Evaluating Current Weather
- Identifying Hazards
- Determining Takeoff/Landing Points
- Adjusting the Flight Profile
- Updating Lost Link Settings

LESSON 8

Crew Coordination

- Determining Appropriate Crew Composition
- Camera Operator Responsibilities
- Visual Observer Responsibilities
- Visual Observer Placement
- Communication Methods
- Crew Briefing

LESSON 9

Mapping & Modeling for Aerial Drone Inspection

- Fundamentals of Mapping & Modeling
- Mapping Software Overview
- Utilizing Mapping Software for Roof Inspection

LESSON 10

Intro to Thermal Imaging

- Thermal Imaging Fundamentals
- Types of Thermal Payloads
- Thermal Roof Inspection

LESSON 11

Using What You've Learned

- What to Bring on a Job
- Sample Workflow
- Interacting with the Public
- Drone Job Resources

Contact Us Today | 800-264-3907 | info@dartdrones.com