

# 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](http://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](mailto:info@dartdrones.com)