



Drone Exploring: Career Spotlights

Construction — Post

Overview: This session takes a serious look at drone-based construction inspection and progress monitoring as a career: the roles involved (drone inspection specialist, progress monitoring technician, site safety support), the certifications needed (FAA Part 107, OSHA 10, and thermography for higher-paying inspection work), and realistic pay ranges. Explorers plan a mock site progress-monitoring flight schedule and build a basic inspection report checklist.

OBJECTIVES

- Understand the roles involved in drone-based construction inspection and progress monitoring.
- Learn the certifications needed for this field: FAA Part 107, OSHA 10, and thermography (Level I) for specialized inspection work.
- Identify realistic pay ranges from entry level to specialized construction drone roles.
- Practice planning a mock site progress-monitoring flight schedule and inspection report checklist.

SUPPLIES

- Laptop and projector to show sample construction drone inspection footage or 3D site models
- Printed handouts: Career Pathway — Construction Drone Specialist and Inspection Report Checklist
- Whiteboard or flip chart and markers
- Optional: printed or digital copy of FAA's free Part 107 study guide (faa.gov/uas)

ADVISOR NOTES

- This session is career focused. Use real certification requirements, real pay ranges, and real job responsibilities rather than a hobbyist framing.
- Highlight that OSHA 10 (a low-cost, widely available safety certification) is often what opens the door to working on active construction sites, alongside Part 107.
- Encourage Explorers who are 16 or older and interested to look at the FAA Part 107 study guide as a concrete next step after this session.
- Consider inviting a guest speaker who works in construction drone inspection, progress monitoring, or site safety to share their career path — see Optional Extensions.
- If no guest speaker is available, Advisors can run the entire session using this outline, the Career Pathway handout, and the resource links below.

SESSION OUTLINE

- **Welcome and Icebreaker** (10 min)
 - “What part of a construction project do you think is hardest to track or inspect, and why?”
- **Safety and Regulatory Moment: Certifications for Job Sites** (10–15 min)
 - Review the FAA Part 107 Remote Pilot Certificate: minimum age 16, required knowledge test, TSA security check, roughly \$175 test fee.
 - Introduce OSHA 10, a low-cost safety certification that's often required to work on active construction sites.
 - Introduce thermography Level I certification as a specialized add-on that opens the door to higher-paying inspection work.
- **Mini-Lesson: The Business of Construction Drone Inspection** (15–20 min)
 - Roles: drone inspection specialist, progress monitoring technician, 3D mapping LiDAR specialist, site safety support

- Typical pay: entry-level roles around \$35,000-\$50,000/year; general construction drone operators \$50,000-\$95,000/year; LiDAR photogrammetry specialists \$100,000+.
- Discuss how detailed reports and documentation are as important as the flying itself for this role.
- **Activity: Plan a Progress-Monitoring Flight Schedule (15–20 min)**
 - Small groups plan a monthly flight schedule for a mock construction project, noting what each flight should capture (foundation, framing, roofing, final walkthrough).
- **Activity: Build an Inspection Report Checklist (15 min)**
 - Using the Inspection Report Checklist handout, groups list what a drone inspection report should include for stakeholders (photos, date, location, issues found, recommended action).
- **Wrap-Up Discussion (10 min)**
 - Groups present their flight schedules and checklists.
 - Discuss the concrete steps (certifications, safety training, portfolio) needed to pursue this as a career.

REFLECTION SECTION

Advisor Note: Some sample questions are below. They are designed to help the participants apply what they have learned to their own interests. You are welcome to use these questions or develop your own.

Focusing Questions

- What surprised you about the certifications needed beyond just Part 107 for this field?
- Which part of this role (flying, safety inspection, reporting) sounds most interesting to you?

Analysis Questions

- Why would a construction company want OSHA 10 in addition to Part 107 from a drone operator?
- How does regular progress documentation help prevent costly problems later in a project?

Generalization Questions

- How is documenting progress over time useful in projects outside of construction?
- What other careers combine a technical skill (flying) with a safety-focused mindset, like this one does?

Challenge: This week, research the cost and requirements for an OSHA 10 certification and note how it could pair with a Part 107 certificate.

OPTIONAL EXTENSIONS

Guest Speaker: Invite someone who works in construction drone inspection, progress monitoring, or site safety to share their career path and take questions, in person or by video call.

Advisor-Led Option: If no guest speaker is available, Advisors can run the full session using this outline, the Career Pathway handout, and the resource links below. No outside expert is required.

Resource Links: FAA Part 107 overview (faa.gov/uas/commercial_operators); OSHA 10 online training providers; thermography Level I certification program information.

Extension Project: Explorers who are 16 or older can begin studying for the actual Part 107 knowledge test using the FAA's free study guide.

Handout: Career Pathway — Construction Drone Specialist

Construction — Post

A typical path into this career looks like this:

1. Interest and Hobby Flying

Learn basic drone operation and become comfortable with photo and video capture.

2. FAA Part 107 Certification (Age 16+)

Pass the FAA knowledge test to legally fly for pay.

3. OSHA 10 Certification

A low-cost (\$25-\$60) online safety course that's often required to work on active job sites.

4. Entry-Level Inspection Work

Entry-level roles pay roughly \$35,000-\$50,000/year.

5. Specialized Certifications and Roles

Adding thermography Level I (\$1,500-\$2,500) or LiDAR photogrammetry skills can push pay to \$100,000+ for general construction drone work (\$50,000-\$95,000 typical range).

Handout: Inspection Report Checklist

Construction — Post

List what your team thinks a drone inspection report should include for each item below.

Report Section	What It Should Include
Date and Location	
Photos and Video Captured	
Issues Found	
Recommended Action	