



Drone Exploring: Career Spotlights

Natural Disaster Support — Post

Overview: This session takes a serious look at drones in disaster response and recovery as a career and volunteer path, including the roles involved (insurance and damage assessment drone pilot, FEMA contractor, volunteer disaster response teams like Team Rubicon), the certifications and airspace considerations (FAA Part 107, emergency temporary flight restrictions), and realistic pay ranges. Explorers plan a mock post-disaster damage assessment flight and discuss airspace coordination with emergency management.

OBJECTIVES

- Understand the roles involved in drone-based natural disaster damage assessment and response.
- Learn the certifications and airspace considerations relevant to this field: FAA Part 107 and emergency temporary flight restrictions (TFRs).
- Identify realistic pay ranges across insurance, government contractor, and volunteer disaster response roles.
- Practice planning a mock post-disaster damage assessment flight plan.

SUPPLIES

- Laptop and projector to show sample post-disaster aerial damage assessment imagery
- Printed handouts: Career Pathway — Disaster Response Drone Specialist and Damage Assessment Mission Worksheet
- 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 organizations (insurance companies, FEMA, volunteer groups like Team Rubicon), real certification requirements, and real pay ranges rather than a hobbyist framing.
- Emphasize that disaster areas often have emergency temporary flight restrictions (TFRs), and unauthorized drones can interfere with search-and-rescue or recovery aircraft, just as with wildfires.
- Discuss that this field includes both paid roles (insurance claims, government contracting) and meaningful volunteer opportunities.
- Consider inviting a guest speaker who works in insurance drone inspection, disaster response contracting, or volunteer disaster relief to share their experience. 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)
 - Ask: "What do you think is the hardest part of coordinating help across a large area after a major disaster?"
- **Safety and Regulatory Moment: TFRs After a Disaster** (10–15 min)
 - Review the FAA Part 107 Remote Pilot Certificate: minimum age 16, required knowledge test.
 - Explain that disaster areas often have emergency temporary flight restrictions (TFRs), like wildfires, to protect search-and-rescue and recovery aircraft.
 - Discuss how authorized drone teams coordinate with emergency management to fly safely within these restrictions.
- **Mini-Lesson: Careers and Volunteer Roles in Disaster Response** (15–20 min)
 - Roles: insurance damage assessment drone pilot, FEMA contractor, volunteer disaster response team member (such as Team Rubicon).

- Typical pay: Insurance and damage assessment drone work is often paid per inspection or project; FEMA-related damage assessment roles range roughly \$40,000-\$80,000+/year for contractor or government positions; many disaster response drone operators contribute as trained volunteers.
- **Activity: Plan a Damage Assessment Flight (20–25 min)**
 - Using the Damage Assessment Mission Worksheet, small groups plan a mock post-disaster survey flight: area to cover, priority zones, safety and TFR coordination, and how findings get reported to emergency management.
- **Wrap-Up Discussion (10 min)**
 - Groups present their mission plans.
 - Discuss the concrete steps (certification, volunteering, contractor applications) needed to get involved in this field.

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 airspace restrictions that apply after a disaster?
- Which pathway (insurance work, government contracting, volunteering) sounds most interesting to you?

Analysis Questions

- Why do disaster areas need the same kind of flight restrictions as active wildfires?
- How does prioritizing damage assessment data help emergency management make better decisions?

Generalization Questions

- How is coordinating with a larger emergency response system like other team-based, high-stakes situations?
- What other careers combine technical skill with a strong desire to help people in urgent need, like this one does?

Challenge: This week, research one volunteer disaster response organization (such as Team Rubicon) or FEMA contractor program and identify how someone could get involved.

OPTIONAL EXTENSIONS

Guest Speaker: Invite someone who works in insurance drone inspection, disaster response contracting, or volunteer disaster relief to share their experience 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](https://www.faa.gov/uas/commercial_operators)); FAA emergency TFR information; volunteer disaster response organization websites (such as Team Rubicon).

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 — Disaster Response Drone Specialist

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A typical path into this field looks like this:

1. Interest and Hobby Flying

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

2. FAA Part 107 Certification (Age 16+)

Pass the FAA knowledge test to legally fly for pay or in a volunteer program.

3. Volunteer or Insurance Work

Join a volunteer disaster response organization or take on insurance damage assessment projects, often paid per inspection.

4. Government and Contractor Work

Pursue FEMA-related contractor or government damage assessment roles.

5. Pay Range

FEMA-related damage assessment contractor or government roles range roughly \$40,000-\$80,000+/year; insurance drone work is often paid per project.

Handout: Damage Assessment Mission Worksheet

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Use this worksheet to plan your mock post-disaster damage assessment flight.

Planning Item	Your Plan	Notes and Risks
Area to survey		
Priority zones		
TFR and airspace coordination		
Reporting to emergency management		
Estimated mission time		