



Drone Exploring: Career Spotlights

Natural Disaster Support — Club

Overview: After a hurricane, flood, or earthquake, drones help emergency teams quickly see which neighborhoods need help most without anyone having to drive or walk into unsafe areas first. In this session, youth learn how drones support disaster response and recovery and practice a hands-on damage assessment activity using a mock neighborhood map.

OBJECTIVES

- Introduce youth to the career of using drones to support natural disaster response and recovery.
- Explain how drones help emergency teams assess damage quickly and safely after a disaster.
- Practice identifying and mapping damage through a hands-on activity.
- Build awareness of why safety and prioritizing the most urgent needs matters during a disaster response.

SUPPLIES

- Flip chart or whiteboard and markers
- A printed or drawn mock neighborhood map (streets and building outlines)
- Stickers or markers to represent damaged and OK buildings
- Printed handouts: How Drones Help After a Disaster and Damage Assessment Log

ADVISOR NOTES

- Emphasize that after a disaster, roads may be blocked or unsafe, so a drone can check on an area before people can safely reach it.
- Explain that damage assessment helps emergency teams decide where to send help first. It's about prioritizing, not just documenting.
- Keep this session sensitive to the fact that real disasters affect real people and communities. Focus on the helpful, hopeful role technology plays in recovery.
- Consider inviting a guest speaker (a local emergency management official, Red Cross volunteer, or disaster response drone volunteer) to share their experience. See Optional Extensions.
- If no guest speaker is available, Advisors can run the entire session using this outline and the resource links below.

SESSION OUTLINE

- **Welcome and Icebreaker** (10 min)
 - “After the Storm:” Ask youth how they think emergency teams would figure out which houses need help first after a big storm, if roads were blocked.
- **Safety Moment (Checking Before Sending People In)** (10 min)
 - After a disaster, some areas may not be safe to enter right away due to debris, flooding, or damaged structures.
 - A drone can check conditions from above before people go in, helping keep responders safe.
 - Ask: “Why do you think it's important to check an area is safe before sending in helpers?”
- **Mini-Lesson: How Drones Help After a Disaster** (15 min)
 - Explain how drones quickly survey large areas after a hurricane, flood, or earthquake to assess damage.
 - Discuss how this information helps emergency teams and insurance responders decide where to prioritize help.
- **Activity: Damage Assessment Challenge** (20–25 min)
 - Using the mock neighborhood map, mark several buildings as “damaged” and others as “OK” ahead of time.

- Teams review the map like an aerial survey and record their damage assessment on the Damage Assessment Log, then decide which areas should get help first.
- **Discussion: How Do You Decide What's Most Urgent?** (10 min)
 - Discuss how teams decide priority, which damage is most severe, and where people might still need immediate help.
- **Wrap-Up Share-Out** (10 min)
 - Groups share their priority lists and explain their reasoning.

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 was tricky about deciding which areas needed help first?
- What surprised you about how drones can help right after a disaster?

Analysis Questions

- Why is it important to check an area's safety before sending in emergency responders?
- How could a quick aerial survey help a community recover faster after a disaster?

Generalization Questions

- Where else in life do you have to decide what's most urgent when there's a lot to handle at once?
- What's one thing you learned today about how communities recover after a disaster?

Challenge: This week, research one organization (like the Red Cross or a local emergency management agency) that helps communities recover after disasters and share one fact you learn.

OPTIONAL EXTENSIONS

Guest Speaker: Invite a local emergency management official, Red Cross volunteer, or disaster response drone volunteer to share their experience, in person or by video call.

Advisor-Led Option: If a guest speaker isn't available, Advisors can run this session using the outline above and the resource links below. No outside expert is required.

Resource Links: Search "drones disaster response explained" on a video platform for kid-friendly explainer videos.

Group Extension: Create a family emergency plan poster that includes how your family would stay safe and informed during a natural disaster.

Handout: How Drones Help After a Disaster

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Read through the key ideas below before starting the Damage Assessment Challenge.

Quick Area Surveys

Drones can survey a large neighborhood or region in a fraction of the time it would take teams to check on foot or by car.

Prioritizing Help

Damage assessment data helps emergency teams decide where to send help first, based on how severe the damage is.

Safety Before Entry

Checking conditions from the air first helps keep responders safe from unstable structures, flooding, or blocked roads.

Why It Matters

Faster, safer damage assessment helps communities get the right help to the right places more quickly after a disaster.

Handout: Damage Assessment Log

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Review your team's neighborhood map and record what you find.

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