

Drones in School Agenda

Target Audience

- **Age Range:** 13–18 years old (middle and high school students)
 - **Location:** Tribal and rural schools in Mountrail County
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Session Format

- **Session Length:** 50 minutes (flexible; more time allows for extended flight practice or Q&A)
 - **Group Size:** Up to 30 students per session (to maximize hands-on experience)
 - **Total Capacity:** Up to 150 students per day
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Session Breakdown

Time	Activity
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10 min	Introduction to UAS & Career Opportunities (PowerPoint presentation)
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5 min	Safety Procedures & Basic Flight Controls (PowerPoint presentation)
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25 min	Flight Simulation Activity: Students simulate wildfire detection using drones
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5 min	Infrared Drone Demonstration: Group-2 drone demo with discussion on real-world applications (e.g., search and rescue, law enforcement)
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5 min	Q&A Session (or extended flight time if Q&A is shorter)
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Fire Detection Activity

- Students work in teams to simulate wildfire detection on tribal lands using Forward Motion Video (FMV).
- UND provides wildfire images with real-world latitude/longitude coordinates from past reservation fires.
- Students:

- Fly drones to locate the fire image.
- Record coordinates.
- Input coordinates into Google Earth or similar mapping tools to identify real-world locations.
- **Three 5-minute scenarios** are run per session, with pilot roles rotated.
- All students are given a chance to fly by the end of the session.

Daily Itinerary (Sample)

Time	Activity
7:30–8:30 AM	Setup (RIAS team of 2–3 people)
9:00–9:50 AM	Session 1
10:00–10:50 AM	Session 2
11:00–11:50 AM	Session 3
11:50–12:20 PM	Lunch Break (Staff)
12:30–1:20 PM	Session 4
1:30–2:20 PM	Session 5
2:20–3:00 PM	Pack-up and equipment breakdown

Resources Needed

Equipment

- 6 Drones
- 24 Batteries
- 12 Cones
- 6 Wildfire Scenario Photos
- Tape
- Large TV or Projector with HDMI input
- Laptop or compatible device

Personnel

- **RIAS Team:** 3 members (or 2 with a Tribal College volunteer)
 - **School Staff:** 1 teacher per session to assist with student supervision and support
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