

Teaching Drones Safety - Resources



Introduction

The following resources are recommended for teaching drone safety protocols, FAA regulations, and responsible UAS operations. Resources are organized by category to support both teacher instruction and student learning, and to clearly distinguish FAA-official materials from supplemental third-party resources.

Online Courses and Certifications

- **FAA – Certified Remote Pilot (Official Materials)**

[Federal Aviation Administration \(FAA\)](#)

The FAA provides **official study materials**, including the *Remote Pilot Study Guide*, Airman Certification Standards (ACS), and sample questions. These resources support preparation for the FAA Part 107 knowledge test.

Important clarification:

The FAA **does not offer a comprehensive, instructor-led “Remote Pilot Certificate Course.”** Certification is earned by passing the FAA knowledge exam (or FAA online training for eligible Part 61 pilots).

- [FAA Safety Team \(FAASteam\)](#) – Free Online Training
 - **Part 107 Small UAS Initial (ALC-451)** – for Part 61 pilots
 - **Part 107 Small UAS Recurrent (ALC-677)** – required every 24 months for certificated pilots

These are **official FAA training courses** and may be used for teacher professional development and regulatory instruction.

- [Drone Pilot Ground School](#) (Supplemental – Paid)

A structured online course that supports FAA Part 107 preparation and drone safety education.

✓ Excellent **supplemental material** for Remote Piloting and Advanced Piloting courses.

! Not an FAA-provided or FAA-endorsed course.

Government and Regulatory Websites

- [Federal Aviation Administration \(FAA\)](#)

Provides authoritative guidance on:

- Part 107 regulations
 - Airspace classifications
 - Operational safety requirements
 - LAANC authorization
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- [National Fire Protection Association \(NFPA\)](#)

Offers resources on drone operations in emergency and public safety environments, particularly relevant to discussions of fire response, disaster operations, and safety coordination.

Educational Videos and Webinars

- **YouTube Channels – Drone Safety & Regulations**

- [DronePilotsForUS](#)
Provides videos that will assist K12 educators in implementing and deploying a Drone Piloting Program
 - [Drone U](#)
Covers airspace, regulations, safety scenarios, and real-world applications.
 - [TheDroneCoach](#)
The Drone Coach offers free video tutorials to help you pass the FAA Part 107 Airmen Knowledge Exam and become a certified remote pilot in the United States.
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- **Webinars by Drone Associations**

- [Association for Unmanned Vehicle Systems International \(AUVSI\)](#)
AUVSI hosts webinars focused on drone safety, operations, industry standards, and workforce development.

Books and Manuals

- **Certification & Regulatory Manuals**

These resources are essential for anyone looking to pass the **FAA Part 107** exam to fly drones commercially.

- [Remote Pilot Small Unmanned Aircraft Systems Study Guide](#). This is the **official FAA guide** (FAA-G-8082-22) for the Part 107 exam. It covers regulations, airspace, weather, and operations.
 - **Author:** Federal Aviation Administration (FAA)
 - **Publisher:** FAA
 - **Cost: Free (Digital)**
- [Pilot's Handbook of Aeronautical Knowledge](#) The PHAK provides foundational aviation knowledge used by all pilots, including those flying sUAS.
 - **Author:** FAA
 - **Publisher:** FAA
 - **Cost: Free (Digital) / ~\$20 (Print)**
- [Professional Drone Pilot's Handbook and FAA Remote Pilot Test Guide](#) A comprehensive textbook designed for both pilots and non-pilots aiming for a Part 107 rating, used in many certified ground school courses.
 - **Author:** Various Industry Experts
 - **Publisher:** CreateSpace / Independent
 - **Cost: \$59.99**
- **Flight Skills & General Handbooks**

These books focus on the actual mechanics of flying and professional best practices.

 - [The Drone Pilot's Handbook](#) An excellent starter book that covers the knowledge, skills, and rules needed for hobbyists and emerging professionals.
 - **Author:** Adam Juniper
 - **Publisher:** Ilex Press / Octopus
 - **Cost: \$24.44**
 - [Drones: The Professional Drone Pilot's Manual](#) Focuses on the transition to professional work, including authoring flight reference cards and managing commercial projects.
 - **Author:** Brian Halliday
 - **Publisher:** CreateSpace
 - **Cost: \$13.24**

Safety Checklists and Guidelines

- **FAA Drone Safety Checklists**

Includes guidance for:

- Pre-flight safety checks
- In-flight operational awareness
- Post-flight procedures

- **Safety Protocol Guidelines (Instructor-Developed)**

Teachers are encouraged to develop handouts and presentations based on FAA guidance and reputable safety campaigns (such as *B4UFLY* and *Know Before You Fly*).

Interactive Simulators

Drone Simulators

- DJI Flight Simulator
 <https://www.dji.com/simulator>
- RealFlight Drone Simulator
 <https://www.realflight.com>

Simulators allow students to practice:

- Safety decision-making
- Emergency procedures
- Risk-free flight operations

Safety Protocol Scenarios

Instructors should incorporate simulated scenarios where students identify hazards, apply regulations, and respond to emergency conditions.

Interactive Simulations and Games

- **DJI Flight Simulator**: A professional flight simulator that allows students to practice drone flying and safety in a virtual environment.
- **RealFlight Drone Simulator**: Offers a comprehensive simulator for practicing drone maneuvers and safety protocols.

Simulators allow students to practice:

- Safety decision-making
- Emergency procedures
- Risk-free flight operations

Safety Protocol Scenarios

Instructors should incorporate simulated scenarios where students identify hazards, apply regulations, and respond to emergency conditions.

Community and Networking

- [Academy of Model Aeronautics \(AMA\)](#)

Provides:

- Safety codes
- Educational resources
- Access to local clubs and mentors

- [Local Drone Clubs](#)

Students can connect with experienced pilots and observe safe, compliant drone operations. Search for local drone clubs through the AMA website or community resources, where students can connect with experienced pilots and engage in safe flying practices

These resources can help high school students deepen their understanding of drone safety and operations while providing practical knowledge and engaging learning experiences.