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UNMANNED AERIAL VEHICLES

Checklist for Drones Flying in Indiana

Introduction

To legally fly an unmanned aerial vehicle (UAV) or unmanned aerial system (UAS), several steps must be taken. This document provides checklists to assist you in that process.

The primary regulatory agency for UAVs is the Federal Aviation Administration (FAA). FAA puts drones in three main categories: 0.55 pounds or less, greater than 0.55 pounds to 55 pounds, and more than 55 pounds.

The regulation and registration of drones varies, depending sometimes on usage but mostly on weight.

Note: All prices are subject to change.

Drones 0.55 pounds or less

- Easiest class of drones to work with, but fewest uses overall.
- Does not require licensing or registration as long as used only recreationally.
- These drones are good for obtaining small-scale images and for indoor use. However, their lack of weight/size makes outdoor flight a challenge.
- Enterprise/Business usage: This means you are NOT using for pleasure, but to support an enterprise/business. Note: if used in this manner, the pilot must have the Remote Pilot Certification. See next section for that.
 - The drone must be registered through FAA.
 - User must be at least 13 years old.
 - Cost is \$5 per drone for 3 years.
 - Link: https://faadronezone-access.faa.gov
 - The registered number you receive must be prominently displayed on the drone

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Drones between 0.55 and 55 pounds

- Basic flights, not including sprayer and spreader applications.
- Insurance is good to have to cover the drone and damage caused by accidents.
- Recreational usage: This means you are using for pleasure, NOT to support an enterprise/business.
 - The drone must be registered through FAA. See above on how to register the drone.
- If you are using a drone to support an enterprise/business:
 - Drone must be registered through the FAA as a Part 107 drone.
 - Note: You cannot switch a registration back and forth between recreational and Part 107.
 - See above on how to register the drone.
 - Obtain Part 107 Certification/Remote Pilot Certification.
 - Must be 16 years or older.
 - Study materials/trainings for the examination. There are various options for this, including free or fee-based, and in-person or virtual.
 - Sign up with the Integrated Airman Certification and Rating Application (IACRA) website to get an FAA Tracking Number (FTN). https://iacra.faa.gov/IACRA/Default.aspx
 - Examination for Part 107
 - Log into https://faa.psiexams.com/FAA/login using your FTN.
 - The exam costs \$96-\$175, depending on your location.
 - Facilities for hosting the exam can be found on the site.
 - A passing score is 70% or better. You will be issued a 17-digit Knowledge Test Exam ID that will be used in obtaining your certificate.
 - Obtaining a Remote Pilot Certificate
 - Go back to the IACRA website with your FTN number and 17-digit Knowledge Test Exam ID from your Part 107 exam report. May take 48 hours for exam to show up in IACRA.
 - You will receive a temporary certificate in a few days to a few weeks.
 - Permanent certificate will be mailed to you. Keep it with you whenever flying.
 - Recertification will be required every two years by exam or continuing education.
- Using spray or spreader drone with chemicals (pesticide or fertilizers)
 - Drone must be registered through FAA as Part 107 drone. See above regarding requirements.
 - Must have Remote Pilot Certification/Part 107 Certification. See above regarding requirements.

- Obtain Office of Indiana State Chemist (OISC) Pesticide Licensure https://oisc.purdue.edu
 - Obtain a business license. To be a licensed applicator, you must be licensed under a business.
 - Purchase and pass (a score of at least 70%) the CORE exam.
 - Manual costs \$40.
 - Training sessions may be available for about \$110, including a manual.
 - Exam fee of \$55.
 - Purchase and pass (a score of at least 70%) the Category 11 Exam for Aerial Application.
 - Manual costs \$40.
 - Exam fee of \$55.
 - Must apply for license and have insurance coverage (\$300,000) as required by OISC.
 - It is not required to hold another category.
- FAA Part 137: (NOTE: you typically will need to have a visual observer during flights, separate from the pilot in command.)
 - You have to request to become exempt from certain parts of 14 CFR (Code of Federal Regulations.)
 https://www.faa.gov/uas/advanced_operations/dispensing_chemicals
 - Obtain certification through local Flight Standards District Office (FSDO)
 - No fees; takes time. Possibly a year or longer. This has five phases:
 - 1) Preapplication phase, 2) Formal application phase, 3) Document Compliance phase, 4) Demonstration and inspection phase, 5) Certification phase
 - The Part 137 operating certificate will designate a chief supervisor who will be responsible for communication with the FAA and responsible for the training and adherence of FAA rules and regulations for pilots operating under the Part 137 operating certificate.
 - Chief supervisor must train other pilots under that operating certificate. Those pilots must prove ability to:
 - Handle loss of signal;
 - Handle loss of control of aircraft;
 - Perform manual and autonomous flights;
 - Create flight logs, maintenance record keeping, and pilot logs; and
 - Demonstrate knowledge of aircraft maintenance, record keeping, and document compliance.





Drones 55 pounds and up

- Drone must be registered through FAA as an aircraft to get an N number. https://www.faa.gov/licenses_certificates/aircraft_certification/aircraft_registry/ua
 - Fill out an Aircraft Registration Application (AC Form 8050-1).
 - Must have a notarized affidavit with information on the aircraft.
 - To complete the N-number, there is a \$5 fee unless you request a special number.
- FAA Part 137
 - You will need to do the previous, but with some additional components, because this is not the same exemption as above.
 - 2nd Class Airman Physical Examination. Cost is \$125.
 - There are additional reporting requirements and regulations concerning reporting flights. Some exemptions require the issuance of a NOTAM prior to operations conducted under Part 137.

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