

# Drone Regulations: Code of Federal Regulation – 14 CFR Part 107

## TRUST vs Part 107

- TRUST – Recreational – flying for fun
- Part 107 – flying for any other reason
  - Examples: Pay for recreational – news footage, YouTube videos, Ranch

## General Regs

- Must be 16 years of age
- Read, Speak and Write English
- Pass the FAA test at a testing center (Casper and Cody). Can try again after 14 days if you failed.
- Pass a background check (which happens after you pass the test)
- Recurrent test every 2 years
- Operate in a civil (commercial) capacity not public (you are a civilian – public as in public safety)
- Drone must weigh **less** than 55 lbs. 55 or more is a different license.
- Must register all drones even sub-250 grams. \$5 each. Must be displayed on the outside (3yrs). If recreational, need to register only if 250 grams or more. Need to be 13.
- Is an unmanned aircraft – no direct human intervention on or in aircraft.
- Report any accident – serious injury, property damage over \$500, within 10 days.
- Visual Observer (VO) – must maintain communication, no visual aids, help scan airspace
- Pilot in Command (PIC) has operational responsibility – can supervise a pilot (only one at a time) if: standing next to, using a buddy box, or have a safe mode button
- Must possess pilot certificate, Source of ID, renewal written exam, registration card, waivers being used. When asked must provide to; FAA, TSA, NTSB, any local, state, or fed law enforcement officer
- Must allow FAA (only) to make any test or inspection of sUAS, PIC, VO, a person on flight controls
- Notify change of address within 30 days
- UAS must be in a condition for safe operation (battery, temperatures)
- Cannot fly, VO, or direct participant if the issue with a physical or mental condition. List of conditions:
  - Effects of OTC meds, dehydration and heatstroke, hyperventilation, stress and fatigue, vision issues, emotional and hunger.
- Must maintain situational awareness – pose no hazard to people, aircraft, property
- Pilot can deviate from a rule only to the extent to address an emergency. Must report deviation if requested from the administrator
- Can operate from a moving vehicle if in a sparsely populated area. Not allowed from an aircraft.
- No alcoholic (8 hrs. bottle to throttle) 0.04 or less. No drugs that affect flight.
- Refusing an alcohol test – denial of application, suspension, or revocation of certificate
- Visual Line of Site – must see drone with unaided eye. If using VO both PIC and VO must see drone. Need to know location, direction of flight, air hazards, endangerment of people and property. FPV does not suffice. Also, if FPV, VO is required.
- No Hazardous material
- Drone must not exceed 87 knots or 100 miles per hour
- Visibility but be at least 3 statute miles (sm)
- Must stay 500 ft below and 2,000 ft horizontally away clouds
- Must not fly higher than 400ft above ground level (AGL)
  - Can fly 400 above and within an object
  - 400 ft on ledge explained. Must stay below 400 ft AGL

- Must give way to all other aircraft
- Can not fly in controlled airspace (B, C, D, E2) unless a waiver is issued
- No flights in restricted, prohibited areas.
- Notice to Airman (NOTAMs) are issued for “temporary” restrictions
- 5 Mile rule around airports does not exist anymore. Any controlled airspace must have approval for flight...even for recreational flying.
- Need to keep records of flights and maintenance.
- Must check weather, airspace, ground hazards, people and property before flight.
- PIC needs to inform all parties involved in the flight about conditions, emergency procedures, contingencies, roles, responsibilities and possible hazards.
- PIC must be sure all components of the sUAS are working and any attachments are secure
- Waivers can be obtained for the following:
  - Operations from moving vehicle or aircraft, VLOS, VO, Multiple aircraft, operating near aircraft, over people, ground speed, minimum visibility, and distance from clouds
- Remote ID goes into effect 4/21. Mandatory Sept 2023
  - 3 methods: drone-equipped software, module on older aircraft, or fly at FAA Recognized Identification Area (FRIA).
- Flying over Humans
  - Category 1: weighs 0.55 lbs. or less, does not have exposed rotating parts, meets remote ID if flying over an open-air assembly if before Sept 23.
  - Category 2: 11 ft-lbs kinetic energy upon impact (not cause injury to humans), no exposed rotating parts, no safety defects, has a label stating Category 2 compliant, listed with FAA Declaration of Compliance (DOC), remote ID
  - Category 3: Not allowed over open-air assembly of people, labeled Category 3, FAA DOC, can fly over humans in close/restricted area where people are notified of drone (construction site), operating outside of a restricted area people must be participating or under a covered structure or inside a stationary vehicle, no exposed rotating parts, not cause injury to human begin equivalent to 25 ft-lbs. of kinetic energy, does not contain safety defects.
  - Category 4: must have an airworthiness certificate under Part 21, operated in accordance with operating limitations, have maintenance, preventive maintenance, alterations and inspections performed, Remote ID.
- Flying over moving vehicles: Must meet requirements for Cat 1,2,3 and
  - Must remain in closed/restricted site and all must be notified of drone
  - Must not maintain sustained flight over moving vehicles
  - Vehicle means any form of transportation (skateboard, car, boat)
- Night operations:
  - Defined as “the time between the end of evening civil twilight and the beginning of morning civil twilight as published in the Air Almanac, converted to local time.” Basically 30 minutes before sunrise and 30 minutes after sunset.
  - Must have taken FAA test after April 6, 2021
  - Have flashing anti-collision light visible 3sm
  - Intensity can be reduced if in the interest of safety
  - Can fly in civil twilight without the training