

RESPONSIBLE
DRONE
OPERATOR
HANDBOOK



EL PASO
INTERNATIONAL AIRPORT



DRONES 101

Fly below 400 feet AGL at all times **NEVER** fly over groups of people

Fly Visual Line of Sight (VLOS) at all times **NEVER** fly over stadiums or sporting events

Pilot in Command (PIC) must know all FAA rules **NEVER** fly within 5 miles of airport (or *heliport*)

Maximum speed 87 knots (100 mph) **NEVER** fly near emergency response e.g., wildfires, first responders, etc.

Maximum weight UAS 55 lbs. (*fuel & attachments count*) **NEVER** fly near other aircraft (*manned or UAS*)

Ensure 3 mile visibility **NO** hazardous materials attached to UAS

DO NOT exceed manufacturer requirements **NEVER** fly at night (*know Civil Twilight in location*) *If possible, consider covered blades/rotors*

CHECKLIST OUTLINE:

- 1 Become a remote pilot
- 2 Receive your Part 107 License
- 3 Purchase and Register your drone
- 4 Ensure drone is insured
- 5 Check LAANC allowable flight areas
- 6 File a flight plan on AIRMAP
- 7 Check NOTAMS and TFRs
- 8 Set UAS Home/Safety Return
- 9 Conduct Preflight



BECOME A REMOTE PILOT

The FAA has created its first and only airman certificate specifically for the use and operation of small unmanned aircraft systems (UAS), called the “remote pilot certificate with a small UAS rating.” A small UAS includes a small unmanned aircraft, weighing less than 55 pounds on takeoff, including everything that is on board or otherwise attached to the aircraft.

The first step is to determine whether you are eligible for a remote pilot certificate. To be eligible, you must:

- **Be at least 16 years old.**
- **Be able to read, speak, write, and understand the English language.**
- **Not know or have reason to know that you have a physical or mental condition that would interfere with the safe operation of a small UAS.**



RECEIVE YOUR PART 107 LICENSE

- **Locate test site** - Use the QR code to search for a FAA approved testing facility near you.
- **Pass Knowledge Test** - Take and pass the FAA Remote Pilot Knowledge Test and obtain the Knowledge Test Report.
- **Register in IACRA (Integrated Airman Certification and Rating Application)**
- Register in the FAA's IACRA system as an "applicant".
- **Submit Application** - Submit an online application for a remote pilot certificate using IACRA.
- **Obtain Temporary Certificate** - After submitting an online application, the FAA will send you instructions by email to access a temporary certificate online.
- **You're all set!** - With a temporary certificate you can be exercising the privileges of your remote pilot certificate! Your permanent certificate from the FAA should arrive by mail.



PURCHASE AND REGISTER YOUR DRONE

After you have purchased your drone, you can register.

You must register your drone with the FAA if:

- **Your drone weighs more than 0.55 pounds (250 grams)**
- **You are flying your drone in the United States of America**
- **You are flying your drone outside**



**Commercial
Registration**



**Recreational
Registration**

INSURE YOUR INVESTMENT

Drones are expensive but also come with a certain level of liability. Drone insurance may provide protection from damages.

There are many different options on the market. Make sure you search for drone insurance that meets your coverage needs.



CHECK LAANC ALLOWABLE FLIGHT AREAS



This is the FAA map that shows where you are allowed to request to fly in the vicinity of airports. In “0” grids, flights will not be approved. 200’ grids allow for approval up to 200 feet. 400 grids allow for approval for flights up to 400ft in these grids.



FAA UAS Facility Map Data



National Security UAS
Flight Restrictions 400' AGL



Class C Airspace



Class D Airspace



FILE A FLIGHT PLAN ON AIRMAP

Airmap is where you can file a flight plan with your drone.

Airmap will show you restricted areas including the LAANC grids.

Scan the QR code to download the Airmap App



CHECK NOTAMS AND TFRS

Checking NOTAMs will help you be aware of any unusual circumstances or weather in the area of your flight.

Temporary Flight Restrictions (TFRs) can be enacted without warning and may prohibit flights in areas not normally restricted.



NOTAMS



TFRS

SET UAS HOME /SAFETY RETURN

Establish the “home” location for the drone to have it return to in the event of an emergency.

Review all emergency procedures.

Conduct a preflight inspection.

CONDUCT PREFLIGHT



Before each flight, the remote PIC must inspect the sUAS to ensure that it is in a condition for safe operation, such as inspecting for equipment damage or malfunction(s). The preflight inspection should be conducted in accordance with the sUAS manufacturer's inspection procedures when available (usually found in the manufacturer's owner or maintenance manual) and/or an inspection procedure developed by the sUAS owner or operator.

- 1.** Visual condition inspection of the UAS components;
- 2.** Airframe structure (*including undercarriage*), all flight control surfaces, and linkages;
- 3.** Registration markings, for proper display and legibility;
- 4.** Movable control surface(s), including airframe attachment point(s);
- 5.** Servo motor(s), including attachment point(s);
- 6.** Propulsion system, including powerplant(s), propeller(s), rotor(s), ducted fan(s), etc.;
- 7.** Verify all systems (*e.g., aircraft and control unit*) have an adequate energy supply for the intended operation and are functioning properly;
- 8.** Avionics, including control link transceiver, communication/navigation equipment, and antenna(s);
- 9.** Calibrate UAS compass prior to any flight;
- 10.** Control link transceiver, communication/navigation data link transceiver, and antenna(s);
- 11.** Display panel, if used, is functioning properly;
- 12.** Check ground support equipment, including takeoff and landing systems, for proper operation;

- 13.** Check that control link correct functionality is established between the aircraft and the CS;
- 14.** Check for correct movement of control surfaces using the CS;
- 15.** Check onboard navigation and communication data links;
- 16.** Check flight termination system, if installed;
- 17.** Check fuel for correct type and quantity;
- 18.** Check battery levels for the aircraft and CS;
- 19.** Check that any equipment, such as a camera, is securely attached;
- 20.** Verify communication with UAS and that the UAS has acquired GPS location from at least four satellites;
- 21.** Start the UAS propellers to inspect for any imbalance or irregular operation;
- 22.** Verify all controller operation for heading and altitude;
- 23.** If required by flight path walk through, verify any noted obstructions that may interfere with the UAS;
- 24.** At a controlled low altitude, fly within range of any interference and recheck all controls and stability.



EL PASO
INTERNATIONAL AIRPORT

NOTES:
