

Operating Rules

Part 107 Part 2

Operations from a Moving Vehicles

- Operating from moving land- or water-borne vehicle
 - Permitted by Part 107 in sparsely-populated areas.
- Operations from moving aircraft is prohibited.
- Small UA transporting another person's property for compensation or hire may not be operated from any moving vehicle.

Alcohol or drugs and the provisions on prohibition of use.

- It is the remote PIC/s responsibility to ensure that all crewmembers are not participating in the operation while impaired.
- Consumed any alcoholic beverage within the preceding 8 hours
- Is under the influence of alcohol
- Has a blood alcohol concentration of .04 percent or greater; and/or
- Is using a drug that affects the person's mental or physical capabilities.
 - THIS INCLUDES OVER THE COUNTER MEDICATIONS AND/OR PRECRIPITON MEDICATIONS (CHECK LABE AND CONSULT WITH YOUR DOCTOR).

Daylight Operations

- Night operations are prohibited
 - Night Operations defined as the time between the end of evening civil twilight and the beginning of morning twilight
 - Published in The Air Almanac
 - Evening twilight is the period of sunset until 30 minutes after sunset and morning civil twilight is the period of 30 minutes prior to sunrise until sunrise
 - Alaska is different, published in The Air Almanac
 - [HTTP://AA.USNO.NAVY.MIL/PUBLICATIONS/DOCS/AIRA.PHP](http://AA.USNO.NAVY.MIL/PUBLICATIONS/DOCS/AIRA.PHP)
 - Civil Twilight Operations
 - UA must be equipped with an anti-collision lights visible for at least 3nm
 - Can be reduced by PIC if it is the interest of safety (night vision)
- Anti-collision lights are not required for daylight operations

Visual Observer Requirements

- VO is optional
- VO must be able to effectively communicate:
 - Small UA location, attitude, altitude, and direction of flight
 - Position of other aircraft or hazard in the airspace
 - Determination that UA does not endanger the life or property of another.
- The remote PIC is responsible to ensure the VO is in the proper location and is fully briefed to perform his/her duties.
- An effective form of communications between the PIC and VO is required and is the responsibility of the remote PIC.

The prohibition of operating multiple sUAS

- No person may act as a remote pilot in command or VO for more than one unmanned aircraft operation at one time.

The prohibition of carrying hazardous materials

- No carriage of hazardous materials.
- Chemicals, etc.
 - Example: NO crop dusting

Visual line of sight (VLOS) aircraft operations

- Remote PIC and person manipulating the controls must be able to see the aircraft at all time during flight.
- VLOS requirement would not prohibit actions such as scanning the airspace or briefly looking down at the small UA CS
- If VLOS is lost it must be regained as soon as possible. i.e. smoke rooftop, tree etc.
- Remote PIC is still responsible for see and avoid during these periods.
- VLOS must be accomplished with unaided vision.

Right-of-Way Rules

- Short answer – UAS **MUST** get out of the way of all other airspace users.
- A remote PIC has a responsibility to operate the small UA so it remain clear of and yields to all other aircraft.
- Must yield right of way to other aircraft.
 - Basically the other aircraft should not alter or delay their flight unless you have a waiver (another section).
- Remote PIC must be aware of other aircraft, persons, and property in the vicinity of the operating area. Maneuvering the UA so it doesn't pose a hazard.

Operations over human beings

- UA will not fly over a person who is not under a safe cover, such as a protective structure, or a stationary vehicle.
 - Person who is directly participating in the operations PIC, VO, etc. is permitted.
 - Selecting an operational site the is clearly unpopulated/uninhabited.
 - Establish an operating area in which PIC has taken reasonable precautions to keep free persons not directly participating in the operation.
 - Having a plan of action that ensures the UA remains clear of person who my enter operating area.
 - Adopt an appropriate operating distance from persons not directly participating in the operations.

Prior authorization required for operations in certain airspace

- Remote PIC is required to know what type of airspace the operations are being conducted.
- Operations in Class B, C, D and E airspace are allowed with the required ATC permission (Airspace Waiver).
- Operations in Class G airspace are allowed without ATC permission.

Operations in the vicinity of airports

- When operating in the vicinity of an airport, the PIC must be aware of all traffic patterns and approach corridors to runway and landing areas.
 - Must not interfere with airport operations
 - Avoid operations in a traffic pattern!

NOTAM restrictions

- Prior authorization is required for class B, C, D or E airspace.
- Areas covered by a Notice to Airman (NOTAM) can also restrict sUAS operations.
- Several websites available to check for NOTAMs
- Check 1-800-WX-BRIEF to check for latest NOTAM

Preflight

- Part 107 requires preflight inspection by the remote pilot in command.
- Preflight inspection should include a visual or functional check of the UA
 - UA airframe
 - UA GCS
 - Communications Check
 - Batteries
 - Control Check
 - **See page 7-3 AC 107-2**

Operating Limitations

- Maximum groundspeed of 100 mph (87 knots).
- Maximum altitude of 400 feet above ground level (AGL) or, if higher than 400 feet AGL, remain within 400 feet of a structure.
- Minimum weather visibility of 3 miles from control station.
- 500 feet below and 2000 feet horizontally from clouds.