

UAS (Drone) Checklist

BEFORE YOU HEAD OUT

- Read [Mines Required Policy](#) (& (FAA [UAS](#)))
- Book Survey Field or written permission for other area @ **(303)273-3434**
- Check Weather—esp. wind speed & precipitation
- Check NOTAM (FAA [Notice to Airmen](#))
- Check TFR ([Temporary Flight Restriction](#)) in area
- Grab correct transmitter
- Ensure Logbook is current & Pack it
- Bring Remote Pilot In Control (rPIC) Certificate
- Verify Insurance is Current (call [Risk Management](#), 303-273-2358)
- Ensure on-board transmitter working
- If flying over people for research, ensure human subjects approval obtained (several weeks ahead); additional approvals apply
- Create flight plan & Pack GPS
- Check First-Aid Kit is stocked & Pack it
- Grab Crash kit, Fire Extinguisher & Pack it
- Pack extra parts and tools for adjustments

PRE-FLIGHT CRAFT

- Inspect Batteries for Damage
- Verify Battery charge or fuel (count in weight) & Keep batteries separated, non-touching, and log them
- Inspect Antenna positioning and wear
- Inspect all rotors for wear
- Tighten any parts e.g., lug-nuts, rotors, etc.
- Perform any necessary maintenance (see UAS booklet)
- Log all maintenance or repairs in logbook
- Ensure any attachments maintain Center of Gravity (CG)
- Ensure UAS Registration is Visible on Craft
- Pack secondary controller/buddy box
- Set UAS for Home/Safety Return**

CREW DESIGNATION

- Pilot in Command _____
- Visual Observer(s) _____
- Log all Crew members and Observers in book

PRE-FLIGHT AREA INSPECTION

- Inspect area for people
- Inspect area for animals
- Check overhead for anything in flight, UAS, etc.
- Obtain any video/photo releases
- Ensure Class G Airspace
- Fly 500 feet from other people
- Move all persons behind flight area or under cover
- Notify nearby people of flight and frequency in use
- Check Atmospheric Pressure & Temperature

FLIGHT REQUIREMENTS

- Do not exceed Manufacturer Requirements
- Fly below 400 feet AGL @ all times
- Fly Visual Line of Sight (VLOS) @ all times
- Pilot in Command (PIC) must know all FAA rules
- Never Fly @ Night (know Civil Twilight in location)
- Never Fly Over Groups of People
- Never Fly Over Stadiums or Sporting Events
- Never Fly Within 5 Miles of Airport (or heliport)
- Never Fly Near Emergency Response e.g., wildfires, first responders, etc.
- Never Fly Near other Aircraft (manned or UAS)
- Maximum Speed 87 knots (100 mph)
- Maximum Weight UAS 55 lbs. (fuel & attachments count)
- Ensure 3 mile Visibility
- No hazardous materials attached to UAS
- If possible, consider covered blades/rotors.

SAFETY DURING FLIGHT

- Never Fly Under Influence Alcohol or Drugs, certain meds, etc.
- Never Fly Recklessly
- Minimum 1 pilot (rPIC) per craft (no swarming)—no exceptions
- Fly away from people (e.g., 500 ft. recommended)
- Always Give Way to Manned Aircraft
SEE & AVOID

POST-FLIGHT

- Collect UAS and any used parts & properly dispose of any materials
- Catalog all activities in Log Book (if electronic print log-book at least every 30 days for file)
- Ensure Remote PIC is renewed prior to 24 months
- Report Any Crashes that Injure People, Animals, or Structures to the Compliance Office within 24-hours of event
 - o Risk Management 303-273-3258
 - o Public Safety Office 303-273-3333

PLEASE NOTE:

- Handle with Care—these are aircraft
- SAFETY FIRST AND ALWAYS
- JeffCo Restricts flights in OpenSpace
- All UAS used for any Research or Educational Activities are to be registered as the Property of the Colorado School of Mines.
- Contact the Compliance & Policy Office if Additional Flight Waivers or Registration Questions occur or are required for a certain research project
 - o 303.384.2236 or compliance@mines.edu or come to 212 Guggenheim