

Unmanned Aircraft System (UAS)





Getting Started



Have a drone? Whether you're a novice drone pilot or have many years of aviation experience, rules and safety tips exist to help you fly safely in the National Airspace System. Think of these tips as a pre-flight checklist to help you fly safely.



Safety Brief



- Safety is KEY in all operations
- Throughout this program safety is stressed
- Failure to follow the safety protocol will result in an instant revocation of flying status!
- Always perform a preflight safety check
- If any safety issues arise immediately notify the instructor and land the UAS
- UAS propellers are very dangerous



Safety Brief



- Never attempt to fly the UAS in adverse weather conditions i.e.: high winds, rain etc.
- Do not fly within immediate range of people
- Maintain minimum 3 yds away from the UAS when operating
- Do not attempt maneuvers above your skill level unless approved by your instructor
- Never operate a UAS without your instructor present
- Always follow the guidance of your instructor



Safety Brief



- Keep your drone within your line of sight
- Be aware of FAA Airspace Restrictions
- Respect privacy
- Never fly near other aircraft, especially near airports
- Never fly over groups of people, public events, or stadiums full of people
- Never fly near emergencies, i.e., fires/hurricanes
- Never fly under the influence of drugs or alcohol

Where Can I Fly?

- Anyone flying a drone is responsible for flying within FAA guidelines and regulations
- It is up to you as a drone pilot to:
 - Know the Rules of the Sky
 - Where it is and is not safe to fly

FAA Airspace Restrictions

- Know airspace restrictions
 - Especially around airports, so your drone does not endanger people or other aircraft.
- Many types of airspace restrictions in the US
- List of restrictions that affect UAS flights:
 - Stadiums and Sporting Events
 - Near Airports
 - Security Sensitive Airspace Restrictions
 - Restricted or Special Use Airspace
 - Washington, DC



Rules for Recreational Flyers



- Always keep the aircraft within visual line of sight
- Give way to and do not interfere with other aircraft
- Fly at or below FAA-authorized altitudes in controlled airspace
 - Only with prior authorization using LAANC
 - Abilene High is in Class C restricted airspace
- Fly your drone at or below 400 feet
 - Applies to Class G (uncontrolled) airspace
- Take The Recreational UAS Safety Test (TRUST)
- Do not operate in a manner that endangers the safety of the national airspace system



TRUST Completion



- Take the free online test thru any FAA approved test administrator
- Correctable to 100% prior to certificate completion
- Download, save or print certificate of completion
- Must present certificate if asked by LEO
- Authorized TRUST administrators



Flying Near Airports



- Drone operators should avoid flying near airports because of other air traffic
 - Difficult for other aircraft to see and avoid a drone
 - Drone operators are responsible for any safety hazard their drone creates in an airport environment
- If you have your TRUST Certificate
 - You must get permission from air traffic control to fly in controlled airspace
 - FAA can grant permission – Low Altitude Authorization & Notification Capability ([LAANC](#)) or [DroneZone](#)
- [UAS Facility Maps and Grids \(airspace restrictions\)](#)



Evaluation of Airspace



- Always assess wind speed and direction!
- Know the Airspace restrictions (B4UFly App)
- Minimum weather visibility of 3 miles
- Look for obstacles in the area
 - i.e. buildings, grandstands, trees, wires, light poles,
OTHER AIRCRAFT OF ANY KIND! Etc.
- Be aware of people in the area
- Always select at least one alternate landing site

Handling UAS as a Team

- Cadets will work in teams of two (pilot and observer)
- One observer and one pilot will take their instructions from an instructor/controller (pilot in command)
- The pilot will focus completely on flying the UAS in a calm, controlled manner
- The spotter will observe the air space around the UAS and warn the pilot of any impending obstacles
- As the range increases the observer can walk along with the UAS and help the pilot maintain orientation
- **COMMUNICATION IS KEY!**