

# Pilot in Command (PIC) Operating Manual

PIC leadership rule is to assure that all Company equipment may only be operated by approved Company employees and can only be used properly for internal or external Company business.

PIC must always follow the Company Code of Conduct for the deployment and operation of the Company's UAS and its equipment.

PIC must always follow all FAA Rules and Regulations for the safe flight and operations of the Company's UAS as defined below but not limited to by these basic rules:

- PIC must always operate at or under 400 feet Above Ground Level (AGL).
- PIC must always maintain Visual Line of Sight (VLS) at all times during flight operations.
- Maximum flight times will be no greater than 30 minutes flight time or with 25% battery power remaining, whichever occurs first. However, sUAS with hybrid power systems may extend the flight time in the air based on 25% of remaining fuel on board.
- Ensure that no persons are allowed within 500 feet of the area except those consenting to be involved and necessary for filming or other approved application uses of UAS.
- PIC must always be sure that the UAS is prepared for flight and that the batteries and or fuel on board is adequate to perform the intended flight and return safely under the UAS lost signal programming.
- PIC must always check the UAS Flight Log and Pilot's Log for discrepancies and maintenance issues.
- PIC must always check local weather of flight operations before launching the UAS.
- PIC must always fly with visual minimums under the Visual Flight Rule (VFR).
- PIC is responsible for the continuous observation of the UAS using the unaided eye (with the exception of corrective lenses).
- PIC must ensure that Bench-Check list has been performed before aircraft arrives on-set.
- PIC must perform all Pre-Flights and Post Flight Check List.



# Emergency Procedures

Additional Emergency Communication can be found in the Flight and Communications Manual.

## A. Review Emergency Landing Zones



1. PIC, VO and other Ground Managers review location for emergency landing Zone (ELZ) Locations in the Flight Envelope.
2. In an Emergency situation if you are able, bring the UAS to the ELZ and land, if not, then land as soon as possible.
3. If major failures have occurred that may endanger life or property, try and maneuver the UAS to any clear area and land immediately.

## B. Loss UAS Control Signal with the PIC Base Transmitter



1. PIC Announce: "I have lost control of the UAS."
  - a. Identify clear areas in case of emergency landing.  
(If possible, use visuals from transmitter.)
 Notify crew and participants through Voice, Radio or Bullhorn.

## C. Emergency Transmitter Controller Protocol (each controller may have different locations for switches and flight attitude)



1. Flip Antenna Switch to High Power.
  2. If in GPS Flip Switch to ATT Test Control
  3. PIC regains control, immediately land UAS.
- (If there is no response.)
4. Flip toggle switch from GPS to Manual
  5. Flip Throttle Curve all the way to Closed Switch Position.
  6. Slow movements (Try to regain control).
  7. PIC regains control, immediately land UAS
    - a. Notify and alert crew and participants through Radio and bullhorn.
  8. PIC Announce: "I have control of the UAS"  
"Be alert, I'm landing UAS now."

## D. Wind or Weather Change



Weather rapidly deteriorates; heavy rain, strong winds, poor visibility.

1. PIC notifies and alerts crew and participants through voice, radio, or bullhorn
2. PIC Announce: "Weather conditions below minimums"

### E. UAS Down Protocol



1. PIC Announce: "UAS down" Make sure everyone is safe!  
If there are any injuries, call emergency services immediately @ 911.
- a. PIC - get crash safety kit on mobile cart: includes fire extinguisher and a first aid kit, etc.

### F. Severe Danger



If the battery has cracked there is increased risk of a chemical fire that would need to be extinguished with water or by other means identified and prepared for during the UAS equipment check list.