

Drone Safety Protocol Sample

Flight Operations Checklist

- Depending on what is agreed upon with local authorities, a Notice to Airman (NOTAM) and coordination will be required a predetermined number of hours prior to operations (check with local authorities to confirm requirements)
- Email internal team members with details 24 hours prior to operations
- Ensure aircraft is labeled with valid unmanned aerial system (UAS) registration and serial numbers

Pre-Flight Preparation

- UAS should be tested in an indoor, netted area prior to conducting outdoor flights
- Visually check flight controls for damage
- Safety switch or battery disconnect prevents aircraft propellers from rotating
- Aircraft and remote control batteries must be sufficiently charged for planned operation
- Protective gear for personnel involved in testing include hard hats, gloves and safety glasses

Flight Phase

- Pilot in Command (PIC) must gain clearance from local Air Traffic Control (ATC) authorities through assigned frequency, if available, and positioned next to active ATC radio during entire flight operation
- Visual Observers (VO) connected via two-way radio and positioned at various transition points where there is high pedestrian traffic while keeping an eye on airspace
- A UAS Safety Officer is assigned to monitor the aircraft logs (e.g. battery, height, exact location) and can serve as an additional visual observer in communication with the team

Post Flight

- Notify that operations have ended and cancel NOTAM
- Only personnel wearing protective equipment should retrieve the UAS inside a controlled zone
- Aircraft must be turned off and batteries disconnected
- Turn off controller/transmission
- Visually check aircraft for signs of damage and/or excessive wear
- Update UAS pilot log book, if available, and log flight information such as deviations from the original plan, mistakes, and test results
- Keep record of UAS monthly reports, including UAS type and model, number of flights, total aircraft operational hours and equipment malfunction for future performance monitoring

Lost Communication and Lost Link Emergency Procedures

- ATC must be immediately notified in the event of any emergency, loss and subsequent restoration of command link, loss of PIC or observer visual contact, or any other malfunction or occurrence that would impact safety or operations or as agreed upon with local authorities

Disclaimer: The information contained in this document is intended to provide a general understanding of drone safety. In no event shall the South County Economic Development Council (SCEDC) and the San Diego Industrial Drone Consortium (SDIDC) be liable for any incidents or damages incurred by use of this safety plan. This document is to serve as basic safety drone protocol and should not be used as a replacement to any existing safety plan. Please refer to <https://www.faa.gov/> for the most current information on drone safety.

- In the event of a lost link, the UAS pilot should immediately notify assigned frequency, state pilot intentions, and comply with the following or as agreed upon with local authorities`
- Lost Link between UAS and GPS – If the UAS reports lost at GPS, the aircraft should be programmed to be flown back to the home point and landed by the PIC
- Observer loses site of the UAS – If the observer loses sight of the UAS it should be navigated back to the pilot/observer location until site is regained or pilot selects “return to home” function and the UAS will perform a flight to home point and land vertically
- In the event of loss communications, the UAS should be piloted to the home point and land vertically. The UAS should remain on the ground until the pilot and observer communications are restored

Operational Safety Procedures

UAS related injury to personnel

- Assess injury and for serious injuries, call 911 immediately
- For superficial injuries (i.e. scratches, cuts, etc.) use onsite first aid kit
- Present the injured party with insurance details as required
- UAS operations team to document the event and contact insurance company

UAS related damage to property

- Photograph and document the event and damage to the area
- Obtain the contact information of the property owner
- Present the property owner with insurance detail as required
- UAS operations to document the event and contact insurance as soon as possible