Drone Preparation Checklist for Drone Operator / Pilots

1. Permissions & Legal Requirements

Check Local Regulations:

Ensure drone usage is permitted at the event location.

• Get Required Permissions:

Obtain any necessary permits or approvals from local authorities, especially in urban or restricted areas.

• Verify Property Permissions:

If the event is on private property, confirm permission from the property owner.

• FAA/CAA Registration:

Ensure the drone is registered if required by aviation authorities (like the FAA in the USA or CAA in the UK).

• Insurance Coverage:

Verify that liability insurance covers drone operations during the event.

2. Site Assessment

• Scout the Location:

Review the site for any obstacles (e.g., trees, power lines, structures) and note designated takeoff/landing zones.

• Crowd Control:

Plan to keep a safe distance between the drone and attendees.

• Set Clear Boundaries:

Mark areas where the drone will be operating, and inform guests to avoid these spaces.

3. Setup Requirements

• Drone & Battery Check:

Ensure the drone is fully charged and has backup batteries available for extended filming.

• Equipment Inventory:

Pack all necessary equipment, including controllers, batteries, propellers, memory cards, and a portable charging station.

• Camera Settings:

Adjust camera settings in advance for optimal lighting conditions (e.g., ISO, white balance, frame rate).

• Firmware Update:

Confirm that the drone's firmware and software are up to date.

• Safety Gear:

Have any necessary safety equipment, such as reflective vests and warning signs, for the drone operator.

4. Weather Considerations

• Ideal Conditions:

Aim for clear, calm weather. Wind speeds should be below 15 mph (25 km/h) for safe flight.

• Rain Check:

Avoid flying in rain or fog, as moisture can damage the drone and reduce visibility.

• Temperature Range:

Ensure the temperature is within the drone's operating limits to prevent overheating or battery issues.

• Monitor Forecast:

Check the weather forecast leading up to the event and prepare for possible delays or rescheduling if conditions are unfavorable.

5. Pre-Flight Preparation

• Calibrate the Compass:

Calibrate the drone's compass on-site for accurate GPS positioning.

• Test Controls:

Perform a quick control check (throttle, yaw, pitch, roll) to ensure all systems are responsive.

• Set Return-to-Home (RTH) Point:

Program the drone to automatically return to a safe point in case of low battery or signal loss.

• Map Out the Flight Path:

Define a flight path, including takeoff, shooting locations, and landing points, based on the event layout.

• Communicate with the Event Team:

Coordinate with the event team about the drone's timing and areas to be filmed.

6. During the Event

• Fly at Safe Altitudes:

Maintain safe altitudes, generally between 100–200 feet (30–60 meters), unless otherwise regulated.

• Avoid Flying Over Crowds:

Stick to perimeter areas and avoid flying directly over people to reduce risks.

• Monitor Battery Levels:

Regularly check battery levels during flight to avoid sudden landings.

• Be Flexible:

Be prepared to adjust the flight path or take a break if unexpected factors arise, such as sudden gusts or new obstacles.

7. Post-Event Wrap-Up

• Retrieve All Equipment:

Collect all equipment, ensuring nothing is left behind.

• Inspect the Drone:

Check the drone and accessories for any signs of damage from the day's flights.

• Backup Footage:

Transfer and back up all footage as soon as possible.

• Review Shots:

Quickly review key footage to confirm coverage and quality.