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## XAG V40/P40/P100 Preflight Check List

### PRE-FLIGHT LINE CHECK

#### Crew Briefing

- Operation Cellphones in Do Not Disturb mode
- Check Airspace
- Confirm Communication method (Cellular, LNT/RCN)
- Confirm Positioning Method (RTK, GPS)
- Discuss Flight Plan and Objectives, Roles and Responsibilities
- Note conditions: geography, weather, sound-mind of personnel
- Note hazards: people, objects, animals, visual limitations, etc.
- Weather Conditions \_\_\_\_\_
- Other Notes \_\_\_\_\_



#### Battery Check

- Flight Battery: Minimum 90% Charge
- Remote Control Battery: Minimum 75% Charge
- Phone/Tablet: Minimum 75% Charge
- (If Applicable) LNT: If using flight battery, minimum 50% charge, if using 12v source, adequately charged
- (If Applicable) Portable RTK: Minimum 80%

#### LNT Configuration (If Applicable)

- Find shaded location which provides open line of sight between LNT, RTK, Drone, and Controller
- Confirm LNT antennas and LNT stand are attached and free of defects
- Connect desired power cable to LNT (Flight battery or 12v source)
- Power on battery then press LNT power button, confirm LEDES show powered on.
- Connect to LNT WIFI network

#### RTK Configuration (If Applicable)

- Select solid and flat ground with open space above. There should be no obstacles over the elevation angle of 15° for continuous tracking and observation of the satellites and high quality satellite signal.
- Set up tripod securely with bubble level centered.
- Attach the RTK extension rod and antenna and power on
- DO NOT MOVE RTK BASE STATION!**
- Open XAG One App
- Open Devices
- Select RTK device
- Click Set Datum, select desired Datum Type
- Confirm RTK is FIXED

#### Mechanical

- Batteries are free from error lights and from physical damage or swelling
- GPS and flight antenna(s) are attached and free of defects
- Motor arms are secure to airframe and in locked position
- Spraying Nozzles are in the correct orientation and in locked position
- Propellers are free from damage, secured and in correct rotational position
- Propellers are Unfolded and locked (If Applicable)
- Landing Gear - secure, no cracks or damage
- Ensure Obstacle Avoidance Sensor, Terrain Sensor and Camera Lens is clean
- Ensure Battery (For P100, 2 Batteries) is fully inserted

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### FLIGHT LINE

#### Reconfirm Area Awareness, check for new non-participants

- Place aircraft on a level surface with tail towards operator, with a safe distance of at least 30ft (10m) from operators, bystanders and obstacles
- Ensure ACS2 Controller is powered on
- Ensure Spray tank is fully inserted, filled, and Level Sensor Cable is connected
- Ensure Drone battery (For P100, 2 Batteries) is powered on
- CLEAR FLIGHT LINE and ensure safe distance of least 30ft (10m) from operators, bystanders and obstacles**
- Ensure all devices are online with no errors
- (If Applicable) Set RTK Base Station (Drone and Optional ACS2 RTK Mapping Rover)
  - Enter device page
  - Open Drone device
  - Select Positioning tab (Satellite antenna Icon)
  - Ensure RTK position is enabled
  - Select desired RTK Reference
  - Ensure RTK is ACTIVE
- If utilizing ACS2 RTK ROVER
  - Enter device page
  - Open ACS2 Device
  - Ensure RTK position is enabled
  - Select desired RTK Reference
  - Ensure RTK is ACTIVE

#### Confirm all Systems Ready

- Discuss any new Area Hazards (people, animals, obstacles, weather, etc.)
- Confirm type of operation (manual or autonomous)
- ENSURE ALL SYSTEMS GO - Notify non-participants to remain behind flight line**
- Manual Operation
  - Hold Both Triggers on ACS2 for 3s to start takeoff
- Autonomous Operation
  - Ensure Entry/Exit routes and flight area is safe
  - Click "Start Operation" and follow prompts to begin take off.
- Ensure proper handling and behavior of aircraft
- Conduct Desired Flight Mission

#### POST FLIGHT OPERATIONS - PILOT IN COMMAND MUST REMAIN IN POSSESSION OF THE REMOTE CONTROLLER/XAG One App

- Manual Landing
  - Hold Both Triggers on ACS2 for 1s to start landing
  - Let aircraft land and rotors come to full stop
- Autonomous Landing
  - Monitor automatic landing
  - Be prepared to override landing in APP or controller is necessary
  - Let aircraft land and rotors come to full stop
- Power off flight battery, then remove
- NOTE: Built in battery backup in the drone will keep avionics powered on for up to 5 min. If a new battery is not replaced within 5 min, drone will disconnect from LNT, ACS2 and RTK and require reconfiguration when powered on again.

**NOTE: FAILURE TO FOLLOW PROCEDURES AS OUTLINED MAY RESULT IN A CRASH, INJURY, DEATH & PROPERTY DAMAGE. PLEASE OPERATE SAFELY.**

Please remember operators must follow all Laws, Rules, Policies and Procedures. Please note: HSE nor its Dealers or Affiliates are liable for any losses or damages related to operating this or any other aircraft