



Wiris Enterprise Flight Checklist

NOTE: *This checklist is intended to demonstrate the data collection workflow. For additional payload operation information, please refer to the Wiris Enterprise Payload Manual.*

Preflight and Mission Planning

1. Complete Preflight Checklist

NOTE: *Ensure GCS power is on and Flight Deck is open before powering vehicle. Failure to do so may result in a communication error. In the event of incorrect camera control on GCS, power down all equipment and complete the Preflight checklist in the given order.*

2. Hold "No Payload Selected" icon
3. Select Wiris Enterprise

NOTE: *The payload selected pre-populates the payload that will appear in the mission plan.*

4. Return to Fly page and select Payload Select icon
5. Hamburger Menu - select:
 - 1) **For EO mission:** "Take visible Image"-**ON**
"Take Radiometric image" -**OFF**
 - 2) **For IR mission:** "Take visible Image"-**OFF**
"Take Radiometric image" -**ON**
6. Use PV inspection calculator to calculate mission height and horizontal offset, if applicable
 - a. Return to the Home page of the GCS and select the calculator

- b. Input given parameters (sensor and lens information, panel angle, and either distance to panel or cm/pixel)
- c. Select "Calculate" to obtain flight parameters
- d. Note these values for mission planning

NOTE: *Visit the Enterprise Payload Manual for additional information on mission planning for PV inspection.*

7. Open Flight Deck and select mission plan tab
8. Select type of mission (survey, corridor, load KML, etc)
9. Adjust pattern selected on screen (including horizontal offset, if applicable)
10. Input necessary flight parameters
 - a. Select appropriate sensor
 - b. Enter mission height from PV calculator, if applicable
 - c. Set mission yaw angle for PV inspection, if applicable
 - d. Adjust other parameters - as required
11. Verify mission settings
12. Name and save mission - as required
13. Upload mission to vehicle

CAUTION: *Ensure the photo interval is at least 2 seconds. Photo intervals less than 2 seconds can lead to mismatched or missing photo and geolog data.*

Takeoff

1. Ensure orange bar under camera/gimbal control icon is not present
2. Complete Takeoff Checklist
3. Climb to at least 10 meters

Note: *Presence of the orange bar indicates communication with the gimbal hasn't been established yet. Conducting a mission with the orange bar still present will result in a lack of gimbal control.*

In-flight Inspection Mission

1. Camera tilt - as required
2. Verify camera operation
3. Engage "Mission start" soft key
4. Systems check - as required

NOTE: *"Trigger" icon will briefly illuminate when camera is automatically triggered.*

In-flight Manual mission

1. Adjust vehicle yaw and payload tilt to desired location
2. Manual "Trigger"- as required
3. Systems check - as required

Post-flight

1. Tilt camera to horizontal position
2. Complete Landing Checklist
3. Unpower aircraft
4. Remove payload from aircraft
5. Remove Micro SD card from camera
6. Remove Micro SD card from logger

NOTE: *Removal of the micro SD card can be difficult. Removal may require the use of a small pointed device to engage latching mechanism.*

7. Download photo and geolog data from Micro SD cards - as required

8. Delete unwanted data from Micro SD card - as required
9. Replace Micro SD cards in appropriate slots
10. Combine geotagged photos and metadata using your choice of analysis software