

## Flight Checklist (Alta X) IGNIS PSD

*Cells highlighted in grey; Aerial Ignition Missions only, all other flights skip these checks.*

<b>Startup</b>	
Power IGNIS	Powered
Power Controller	On, ___ % of Charge? And Charging
Tablet on, Charged	IGNIS App open
Power Alta X	On, Batteries Charged & Secured to Aircraft
Wi-Fi Configuration	Contrast App connected / Packets Received
Connection	Success
<b>Preflight</b>	
Green light	Ignis
Aircraft Settings - Diagnostics - RTL Altitude	Verified
Ignis Settings	Verified
Ignis App Fly Button	Map and Video
Geofence	Completed
Waypoints for drop pattern reference	If needed
Payload	Configured and Attached
Arms/Props	Extended & Attached - Cam Locks - 8 Dampers
Landing Gear	Attached & secured on aircraft
<b>Before Takeoff</b>	
RC Antennas	Pointed properly & secured on aircraft
GPS	Flight Mode Set - Position Control
RSSI	Normal
Gimbal	Operating – Set to 90 Degrees
Camera	Displayed on Tablet
IGNIS Arm Switch	Arm to Idle, Disarm
Takeoff Area	Clear
<b>Takeoff</b>	
Aircraft	Report "Armed" Left stick Down & to the Right
Aircraft	Report "Taking Off"
Takeoff Time	Recorded
<b>After Takeoff</b>	<b>Aircraft 20' out and 20' up</b>
Telemetry	Report Telemetry
Controllability Check	Ready to go
<b>Note: Periodically report battery % and RSSI during flight</b>	
<b>Before Landing</b>	
Aircraft Orientation	Nose Out
Gimbal	90 Degrees
Landing Gear	Fixed
Landing Area	Clear
<b>Landing</b>	
Aircraft	Report "Landing"
Aircraft	Report "Disarmed" Left stick Straight Down
<b>After Landing</b>	
Camera	Stopped/Off
Antennas	Stowed
Landing Time	Recorded
Aircraft	Powered Down
IGNIS	Powered Down
Tablet	Off
Controller	Off

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## Troubleshooting/Emergency Procedures

### Alta X Connection

1. Wifi Hotspot Configuration:
2. Enable the Wi-Fi hotspot on the NW Blue
3. Connect the tablet to the NW Blue Wi-Fi
4. Close any other GCS app running on both the tablet and GCS
5. Start the Contrast App on the GCS
6. Start Ignis Px4 on the tablet
7. In Drone Setup on Ignis Px4 on the tablet, set the Mavlink connection to "NW Blue Wi-Fi (running Contrast app):  
Drone Setup on Ignis Px4 on the tablet, set the Video Feed connection to "NW Blue Wi-Fi (running Contrast app):

#### **Still no packets?**

Be patient/Check HDMI cables both at the Gimbal & Air Unit  
Recycle aircraft if still no connection  
Format SSD card using laptop

### **Emergency Procedures**

*(Start Camera recording when able)*

#### **Loss of GPS**

- Gain or maintain visual on aircraft if able
- Achievement of aircraft orientation
- Switch to Altitude Mode
- Return to launch area, or best landing location

#### **Loss of Link**

- RTL followed by Autoland will be initiated automatically
- Change the antenna orientation for best signal strength. Ensure the radio antenna matches the direction of the receiver antennas.
- Yaw the aircraft to maximize signal strength
- Re-establish control when able
- Once control is available, the operator Remote Pilot should land in position control mode

#### **Battery Exhaustion**

- Land as soon as possible
- The Remote Pilot will remain in full control in both flight modes and full throttle authority is available to the pilot in a battery exhaustion event
- Will only Autoland if the battery exhaustion failsafe is set to RTL

#### **Loss of Camera**

- Orientate using map (either tablet or GCS) return to launch area

#### **Loss of Landing Gear**

- Loss of 1 "skid" land gently on flattest ground available; soft ground if available
- Loss of 1 "leg" land on a solid equal height object *if can be done safely*. Support the corresponding booms with selected objects. (Alta X case & Charger box)
- Loss of both hover over as soft as ground available and Emergency Disarm Aircraft at the safest lowest height

#### **Loss of Propeller**

- Camera down gain visual on open ground clear of people and property
- Introduce counter yaw
- Continue to assess controllability
- If Aircraft is uncontrollable, emergency disarm

**Always consider the safety of yourself and others before attempting to save the aircraft in an emergency**

#### **Emergency Disarm**

**Emergency Disarm Aircraft in Flight  
Ignis App / Soft Key Controller / Disarm  
or  
Put Alta X in Altitude Mode  
Move the left stick down and left for 1.5 sec**