

Some Assembly Required Checklists

Start of Flight Ops / Location Change

- Weather check – METAR, 800.WxBrief
- Crew Briefing (roles and goals)
- Safety inspect aircraft (AC)
- Power on GS computer (laptop) and verify computer battery charge
- Start mission planner (MP) and verify maps are perfected / download maps
- Power on TX and verify battery charge and set TX to minimum
- Power up Aircraft (AC)
- Connect MP to AC
- Verify the video signal is good at the location (distance check). Select a new channel if needed.
- **Set bottle grabber to open**
- Perform compass and IMU calibration if required
- Set Failsafe – Battery (**4S - 14.2V**, 3S 10.8V) (set in Initial Setup | Falsafe)
- Set Failsafe – Radio loss link to RTL (set in Initial Setup | Falsafe)
- ~~Set Geofence and upload to AC~~
- ~~Set minimum Altitude and verify voice warning is on~~

Notes:

RTL Altitude - Full Parameter List, **RTL_ALT** (Height in cm 1 to 8000) Default is 15m (1500cm)

RTL decent speed - **LAND_SPEED** (speed in cm/s 20 to 200)

Pre Takeoff (Autonomous Flight)

- Safety inspect aircraft
- Verify camera lens clean and pointed straight down
- Power on GS computer and verify computer battery charge
- Start Mission Planner
- Power on TX and verify TX battery charge > 5.2
- Power up aircraft
- Power on monitor and confirm video and OSD (reboot aircraft if needed)
- Connect Mission Planner to aircraft
- Verify AC battery charge (> 15.8V)
- On the flight planner screen, enter the Takeoff (**100 FEET, hover 5 sec**) and RTL commands
- Set waypoints for the mission
- Upload waypoints for autonomous mission
- Verify GPS Lock (Sat count > 10, HDOP <1.0)
- Arm the aircraft!!
- Verify Airspace Clear
- **EYES ON THE QUAD !!**

When the aircraft Lands (Battery Swap)

- **Disarm** the aircraft (press and hold until Led blinks)
- **Swap** the battery
- Wait 10 seconds and press **ARM** button
- **Safety inspect** the aircraft - check for missing legs, props for damage
- Verify bottle grabber is **OPEN**
- Verify camera lens clean and pointed straight down
- Confirm video and OSD on the monitor (reboot aircraft if needed)
- Connect Mission Planner to aircraft
- Verify AC battery charge (**> 16.0V**)
- Verify GPS Lock (Sat count > 10, HDOP <1.0)
- Verify Airspace **Clear**
- **EYES ON THE QUAD !!**

Day Before

- Charge all flight batteries
- Charge monitor
- Fresh batteries in TX

- Pre-fetch maps for flight location in MP
- Verify MP laptop has no pending Windows updates, then turn off WiFi !!

Packing

- Quadzilla
- Flight Bag - TX, Mavlink TX, batteries, props
- MP Laptop and charger
- Flight Batteries and charger
- Tool bag
- Safety supplies
- Spare parts box
- Remind team to bring sunglasses