

# Typhoon H Flight Check List

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_\_ Flight #: \_\_\_\_\_ Location: \_\_\_\_\_  
 Aircraft ID: \_\_\_\_\_  
 Weather Conditions: \_\_\_\_\_ Battery# \_\_\_\_\_

## Pre-Flight Prep (before leaving home)

**Check**

All Batteries FULLY Charged (aircraft, ST16 and spares)

  


**Inspect Typhoon H for any signs of Damage or Missing Parts:**

- Arms (6) \_\_\_\_ include Locking Clips on aircraft and arm
- Motors (6) (clean, securely attached and outer hub moves freely by hand) \_\_\_\_
- Landing Gear \_\_\_\_
- Lights/Lens \_\_\_\_ Motor (6), Main
- Body (no cracks) \_\_\_\_
- Antennas \_\_\_\_
- Real Sense Module \_\_\_\_ if installed
- Propellers (including spares) **DO NOT** install \_\_\_\_

All Aircraft Batteries \_\_\_\_ **Verify spring latch not broken & springs up strong**

  


Spare Parts & Accessories (propellers, batteries, Camera filters, etc.)

in good working order and complete

**Inspect Camera for any signs of Damage or Missing Parts:**

- Remove Camera
- Lens/Filter Clean \_\_\_\_ If desired remove and install special Filter (i.e. ND8)
- Verify camera rubber mounts & Keepers in place and protective cover installed \_\_\_\_
- If not installed, install microSD Card \_\_\_\_
- Install Camera Cover \_\_\_\_
- Install Camera on aircraft verify **LOCKED** into position \_\_\_\_

Sun Shade and ST16 Lanyard complete and in Working Order

  


ST16 Ground Control Station **install Antennas** - Turn On and check display, Verify proper switch operation

this can be done by going to "System Settings", "Hardware Monitor", check for smooth & proper operation on display

Manuals and other Documentation (i.e. license, etc.)

  


Verify registration markings on aircraft for proper placement and legibility

If going to a location that is a NFZ (No Fly Zone) Notify and get clearance from Appropriate Authority (i.e.. Near a Airport)

  


Check FAA web site for any TFR's (Temporary Flight Restrictions) for the location going to or

install and/or Check "B4UFLY" FAA app on your Smart Phone for location going to

## On Site Pre-Flight Prep/Set Up Checks

Check

Select a **level area** to place the Typhoon H with approx. 26 ft. (8m) clearance  
this distance will be needed if switching ON "**Smart Mode**" after takeoff

**Check Flight Location for obstructions that may interfere with flight/Typhoon H performance**  
i.e. trees, buildings, Power Lines, Radio/microwave Towers, people traffic etc.

### For the Typhoon H:

Raise Typhoon H Arms and Verify **LOCKED** in Up position

**If Location is 20 miles (32km) from last flight** a COMPASS Calibration may be needed.

If above check/observation has items which **may affect COMPASS performance** or if **UNSURE** perform Calibration  
Refer to manual for correct procedure.

Install propellers in proper location, A on A arm, B on B arm, Verify they are properly attached  
by holding the motor and twisting propeller in the proper direction

Place Typhoon H on selected area with **Front Facing away from you and others** **DO NOT** power Up

Remove Camera cover store in secure place

Clean Camera Lens

If installed Verify *RealSense* Lens Clean

### For the ST16 Ground Station:

6 or more Satellites are needed to **START** the motors

Attach Antennas, lanyard and sun shade, **Power on ST16 FIRST**

Verify correct model is displayed in upper left corner -- If not correct

#### To Power on Typhoon H

**Inspect** then Insert Battery \_\_\_\_ Verify spring latch not broken & **springs up strong**

with palm of hand push the battery (handle down) into the aircraft with medium force so it "CLICKS"

**DO NOT** move the Typhoon H **after power on as it is acquiring GPS data for its present location**

**NOTE:** when powering up the Typhoon H observe the Main LED for first 1-2 sec's for Battery Charge Level  
if LED is Green = Full Charge, Yellow = 1/2 Charge, Red = Battery Low

**DO NOT** Fly on Yellow or Red

#### Power up the Typhoon H

**Wait** then Verify Typhoon H and Camera data link -- Typhoon H telemetry data showing on left side of display  
and camera's *present* view being displayed on screen

Set "**Home Mode**" (*RTH*) height from your previous area observations

Tap "*Settings/Calibration*", "*Home Altitude*", move *slider* to desired height

Format SD card if desired

Tap "*settings*" icon, scroll to "*Format SD Card*", Tap to format SD card in Camera  
verify correct SD card size - upper right display corner of ST16

Setup Camera as desired (ref pg. 4) Adjust the White Balance and Exposure if desired

#### Verify ST16 switches , sliders and knobs in PROPER Flight Configuration:

**OBS AVOID** (S3) **OFF** (OFF position) \_\_\_\_ if desired switch **ON** after takeoff and control checks

**FLIGHT MODE** switch (S4) **ANGLE** (MID position) \_\_\_\_ Change mode **After takeoff and Control checks**

**LANDING GEAR** switch (S5) **DOWN** (DOWN position) \_\_\_\_ switch to **UP** (UP position) after takeoff and control checks

**CONTROL RATE** slider (K3) i.e. *turtle/rabbit* full **UP** (rabbit position) \_\_\_\_ for takeoff -- change when in the air

**GIMBAL TILT MODE** switch (S1) **UP** (A position) \_\_\_\_

**PAN MODE** switch (S2) **UP** (F position) \_\_\_\_ camera will always Face the front of Typhoon H with this setting

**PAN CONTROL** knob (K1) **CENTER** (MID position) \_\_\_\_

**GIMBAL TILT** slider (K2) **UP** position \_\_\_\_ camera should be level with Horizon

## Control Checks (in **ANGLE mode**)

10 or more satellites on ST16 & Typhoon H will be needed for some flight modes

If new location or Aircraft has not been used for a period of time, you will need to WAIT for GPS Data Collection with aircraft powered up motors **OFF** [can take upto 15 min - battery power consumption will be low]

### **SAFETY WARNING!!**

Verify and maintain area Clear of People/Pets etc. With Landing Gear Down

Typhoon H will **NOT** Avoid obstacles. (i.e. pets, children etc.)

When SAT's on ST16 and aircraft are **STABLE**

Check

**Taking-off:** (2 options)

**1) Using stick (manual) ANGLE mode**

**START** Motors (Press Red Button on top 1-2 sec's) - Raise left stick until the Typhoon is approx. 10 ft. (3 m) up

**2) Using Task Function (auto) [Note:** Motors must be off to use]

Press "Task/Camera" to bring up Task Functions and tap "TAKEOFF" then slide slider

Typhoon H will start motors and climb 6 ft. (2m) and Hover - Ready for Pilot to take control

**Test Control Sticks** to verify Typhoon H is responding properly to inputs

IF aircraft response is **improper LAND** and **Do Not fly** Correct problem

Test Camera Pan and Tilt

**If checks are OK** - select new flight mode if desired (i.e. *Smart*, a Task, etc.)

**Remember the 26 ft. (8m) rule if going to Smart Mode on**

**"OBS AVOID" Cannot be activated** until the aircraft is: **10 ft off ground and Landing Gear UP**

Raise Landing Gear

Start Video recording if desired

Change **Rate Control** (Turtle/Rabbit) if desired

## Landing/Landed

Typhoon H will **not** go lower than 6ft. (2m) with Landing Gear Up

### **SAFETY WARNING!!**

Verify and maintain Landing area Clear of People/Pets etc. With Landing Gear Down and descending

Typhoon H will **NOT** Avoid obstacles. (i.e. pets, children etc.)

IF **OBS Avoid** is **OFF** **VERIFY** flight path Clear

**Landing:** (2 options)

**1) Using stick (manual) ANGLE mode**

Maneuver Typhoon H to Landing Location

**Over Location:** **OBS Avoid OFF** \_\_\_\_\_

**Rotate** Typhoon H to **Face Away** from Landing site \_\_\_\_\_

Lower Landing Gear and Descend \_\_\_\_\_

When close to landing [i.e. 10ft (3m)] Change **Rate Control** to Slow (**Turtle**)

On ground Landed: **CAUTION: Hold Left Stick Down for 2-3 sec's until the motors slow down**

**you will see/notice the Typhoon H settle down or hear motors slow**

**STOP** Motors (Press **Red** Button on top of ST16 2-3 sec's) \_\_\_\_\_

**2) (RTH) On Flight mode switch select Home mode**

Typhoon H will: fly to **PRESENT** location of **controller**, Rotate facing away from location, lower landing gear, descend, land and Turn OFF motors.

Verify video recording **Stopped**

Turn **OFF** Typhoon H and **REMOVE** Battery

## Camera Set Up

### Video mode:

Press the **Video** icon - then settings icon next to "TASK/CAMERA "

- "Video Setting " select desired resolution and frame rate i.e. **1920x1080F30**
- "Audio Switch " on/**off** controls the microphones (2) in camera
- "Photo Format " Greyed out N/A
- "Image Format " *Natural, **Gorgeous**, Raw, Night* are selections
- "Single/Team " Verify **Single** press to change if using more than one controller ("Team mode")
- "Reset Camera " put settings back to defaults
- "Video Switch " **ON** - *off* turns video feed from camera off
- "Format SD Card " press to format SD card in camera **only**
- "Histogram Switch " **OFF** - turns on histogram icon which can be moved anywhere on screen
- "Metering Mode " **Average**, *Center, Spot* are selections - used to adjust video exposure (i.e. balance colors)

Check

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### Photo mode:

Press the **Camera** icon - then settings icon next to "TASK/CAMERA "

- "Video Setting " this is the resolution used for photo's - if you wish to change you will need to go to *Video mode* to change then switch back to *Photo Mode*
- "Audio Switch " Greyed out N/A
- "Photo Format " jpg, dng (raw), **dng+jpg are selections**
- "Image Format " *Natural, **Gorgeous**, Raw, Night* are selections
- "Single/Team " Verify **Single** press to change if using more than one controller ("Team mode")
- "Reset Camera " put settings back to defaults
- "Video Switch " **ON** - *off* turns video feed from camera off
- "Format SD Card " press to format SD card in camera **only**
- "Histogram Switch " **OFF** - turns on histogram icon which can be moved anywhere on screen
- "Metering Mode " **Average**, *Center, Spot* selections - used to adjust video exposure (i.e. Balance colors)
- "Photo Mode " select from **Single**, *Burst, Timelapse, Panorama*

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