Module 2: SOP Of Using Drone

Session 6:
* Power-on Checks

Power-on Checks
Step-1: GCS setup

- power-on GCS tablet by pressing the power button on top tablet as shown
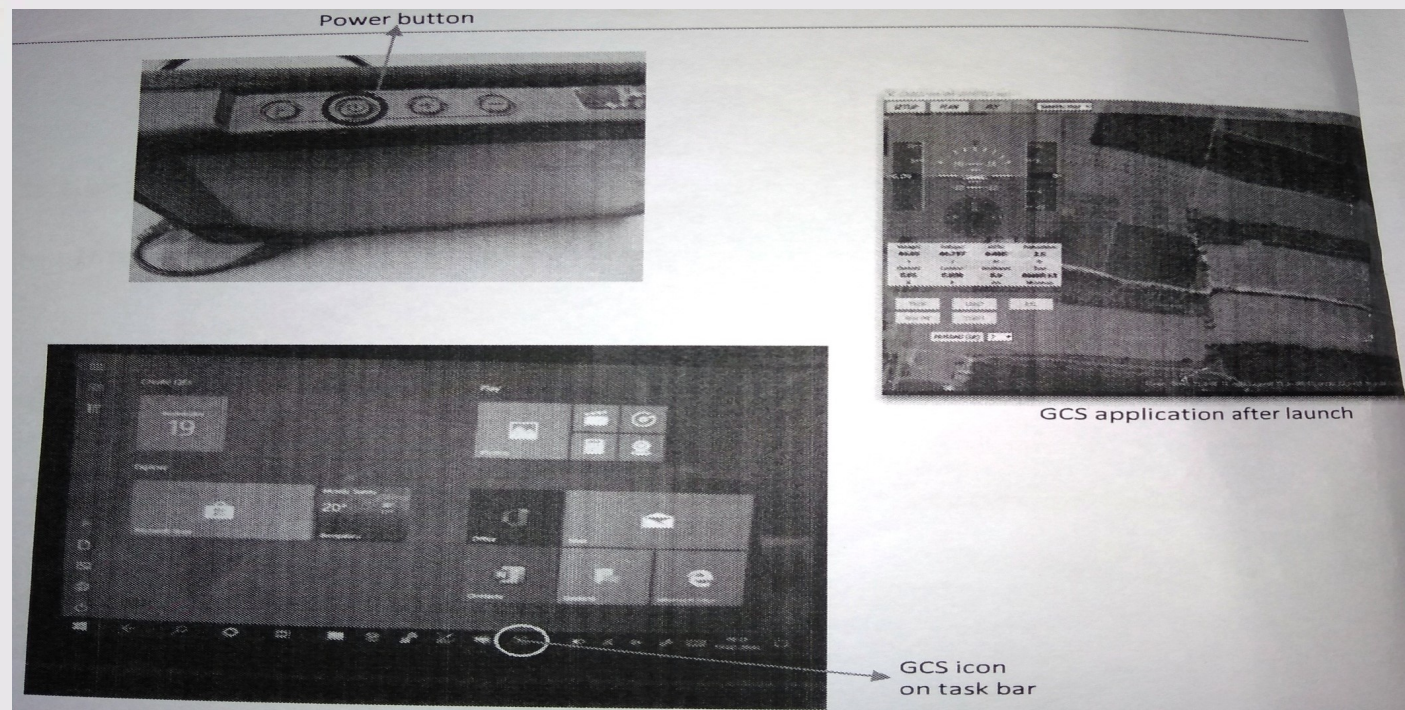
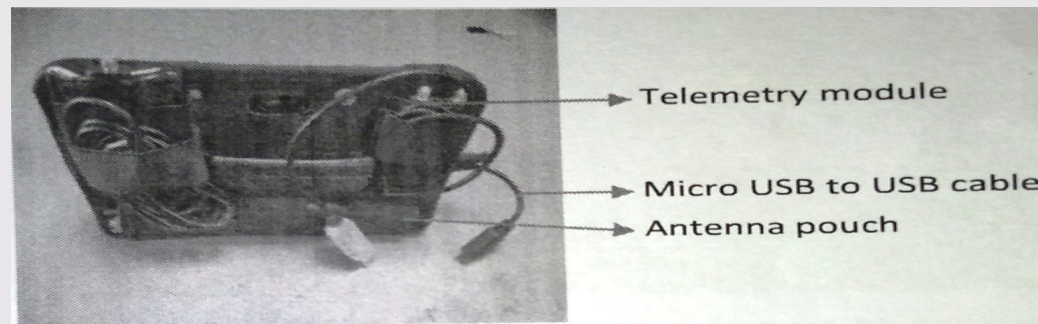# Step-2: GCS and GDT connections

- Take-out GDT antenna's and connect them to GDT module provided in the back pouch of GCS tablet.

Telemetry module

Micro USB to USB cable

Antenna pouch

Antenna connection

- Connect GDT to GCS tablet using the USB cable provided

• GDT side connections are shown in the figure

Step-3: Power-on RC Transmitter

- Power-on RC transmitter by pressing the power button once
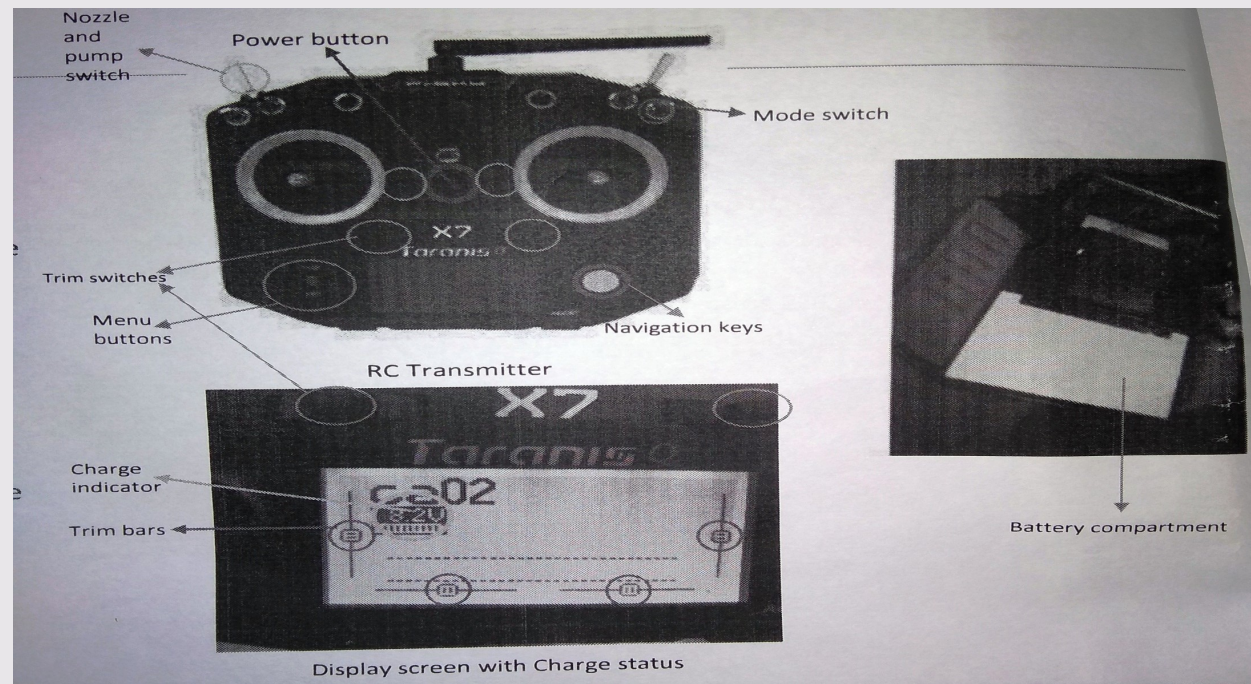
- Ensure the trim buttons are centered as shown in the figure
- If not centered use the trim switches of the corresponding channels to center it.
- Mode switch is the small switch on the top right corner
- Payload controlled via long switch on the top left corner I Battery is placed at the back in the compartment provided
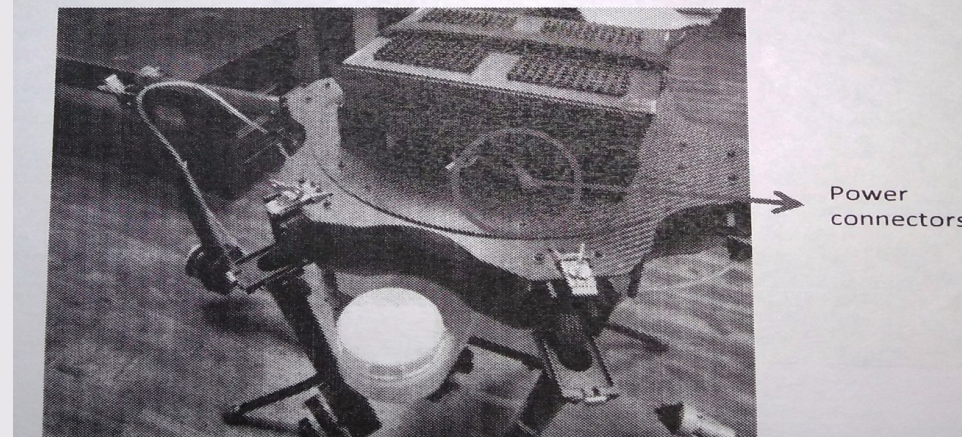- Navigational keys are on the top facing on either side of the display.

Step-4: Battery health check and mounting

- As shown in the product overview document check the battery voltage and percentage

Capacity checker

- Battery voltage should be > 24.5 V and >96%
- Place the battery with heat sinks facing top in the slots provided on the top plate
- Battery power outlet cables should be facing the rear of the RPAS and towards the RPAS power connectors
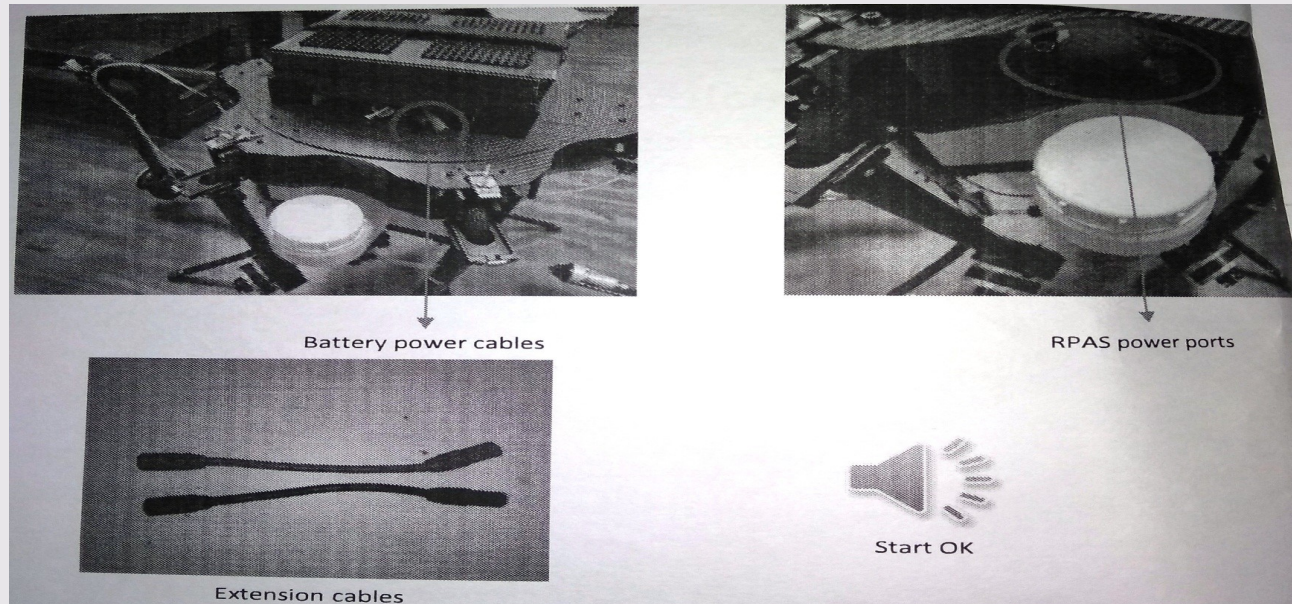
Step-5: powering RPAS

- Connect the battery power cables to RPAS power input ports using the extension cables (**BLACK** first and **RED** next)

Battery power cables
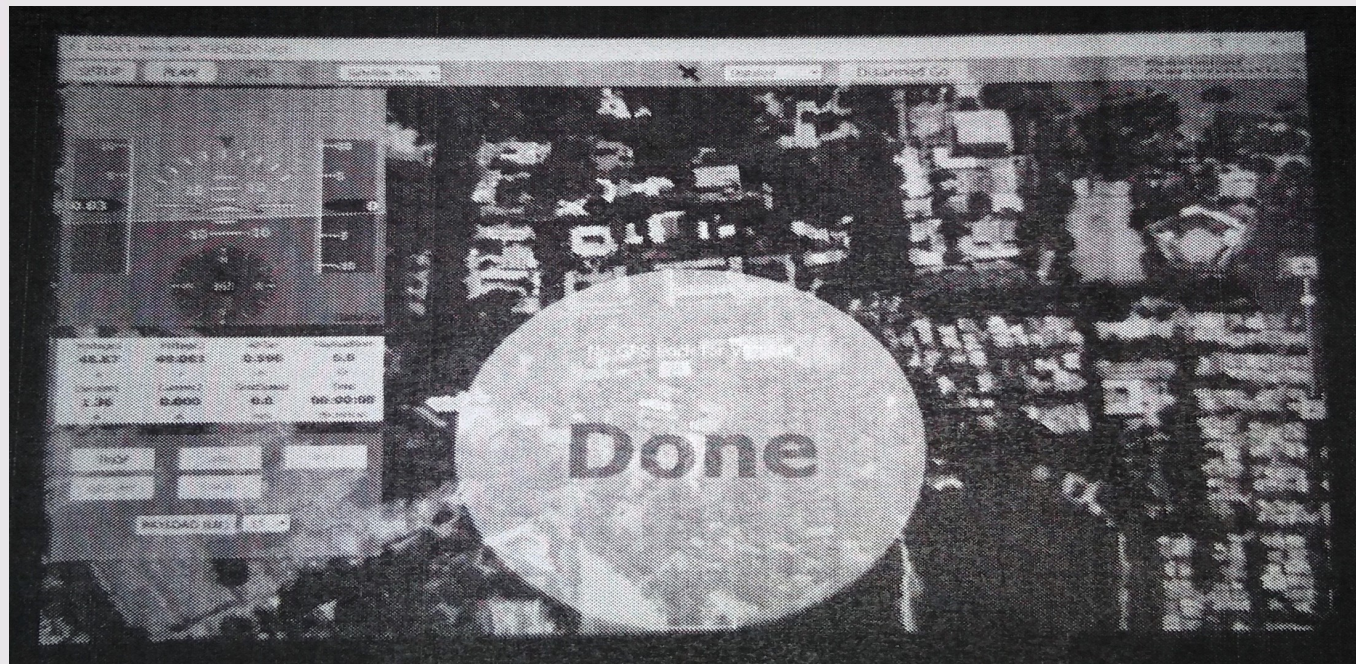
RPAS power ports

Start OK

Extension cables

- Wait for RPAS to initialize (will hear a tone)
- Tone indicates "Start OK"

Step-6:Communication setup

- Upon launching GA-GCS application, connecting GDT to GCS tablet and powering RPAS

- RPAS will automatically connect to GCS through the telemetry

- Once after connection established Telemetry data will start to appear in the GCS screen as shown in the figure

- DONE will be displayed as the RPAS establishes communication with GCS

Step-7: Parameter and mode checks

- Check the following parameters are updated
- Flight Mode (current flirt mode will be displayed, flight modes explained in the next slide)
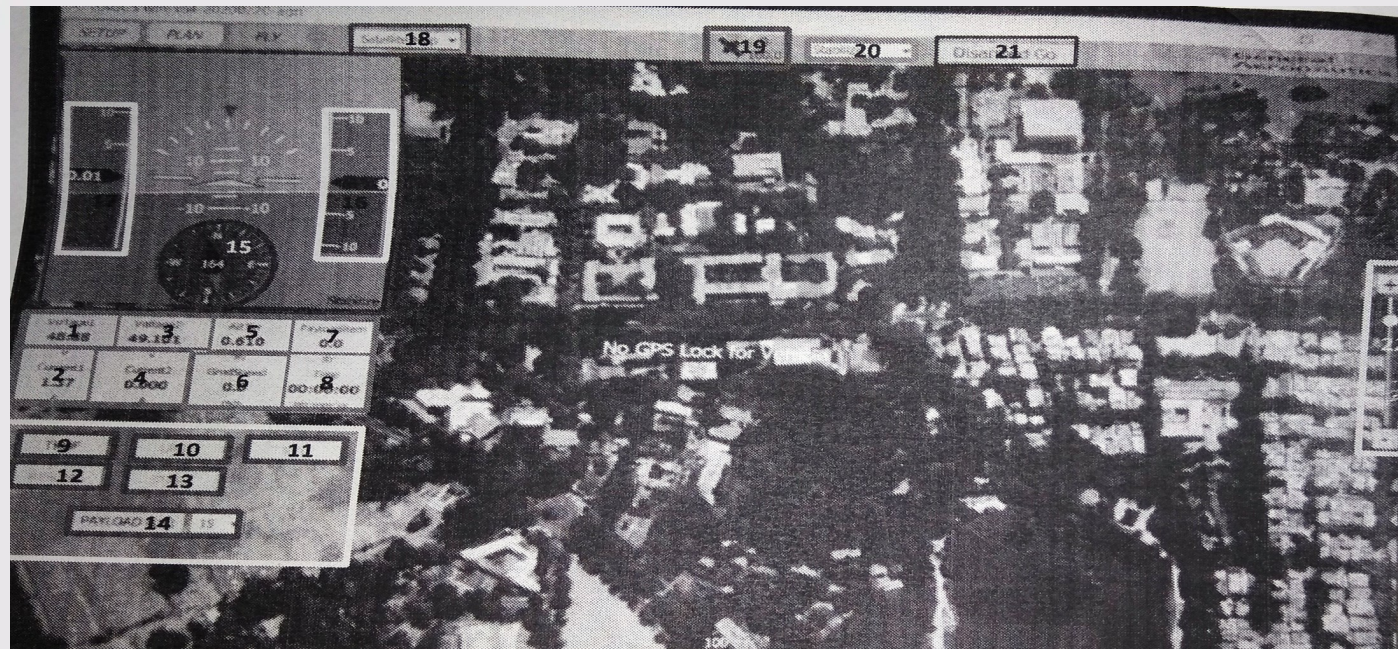
- Voltage and current (battery voltage should be similar to voltage checked with capacity checker)

- Terrain altitude(altitude information from the Terrain RADAR sensor is displayed here)

- Heading dial (heading data from the compass will be displayed here)

- Rem. Payload (update the payload from the dropdown provided at the bottom of the parameter section, should reflect in the Rem. Payload parameter tab) 11
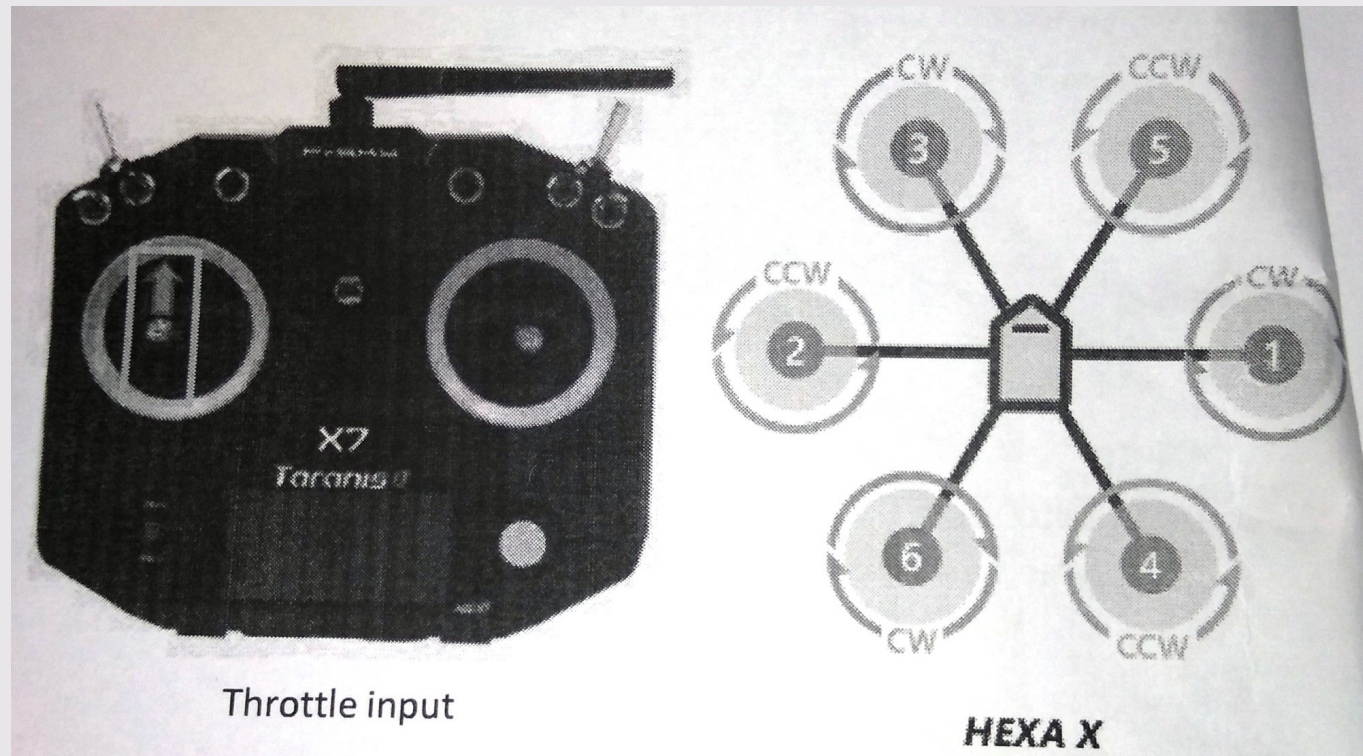
Satellite count and hdop -

- Sats - >16 (when powered-on indoors, this will be 0)

- Hdop <1 (when powered-on indoors, this will be 100)

STEP – 8: Motor checks

- Long press the safty switch button provided on the GPS module until the RED light becomes solid

Throttle input

HEXA X

- Take the RC transmitter
- Now arm the vehicle by holding the throttle stick to the right bottom corner at least for 5sec in the RC transmitter.
- A long tone can be heard indicating the RPAS is armed
- Now move the throttle stick above center position for the motors to start spinning.(move the throttle stick above zero position after arming, otherwise the RPAS will disarm automatically)
- Ensure all the motors are spinning
- Now hold the throttle stick to left bottom corner for 5 sec to disarm RPAS
- If any of the motors is not spinning, refer to the user manual

Step- 9 : disconnecting and packing

- Disconnect the battery connections (RED first and BLACK next)
- Power-off RC transmitter
- Disconnect GDT connection from GCS tablet, close the appli9cation and close the tablet
- Remove the battery from RPAS and keep in storage place.

Thank you…