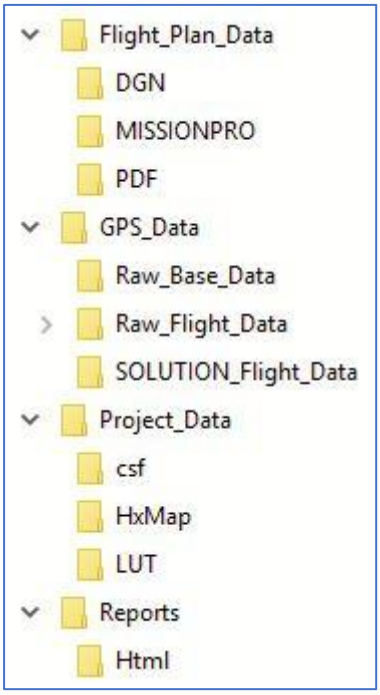
TEST AREA FILE STRUCTURE FOR SUBMISSION

The test area information should be submitted under 3 folders namely: 1.) ANCILLARY_ FLIGHT_ DATA 2.) CALIBRATION_CERTIFICATE 3.) DIGITALA_CAMERA required

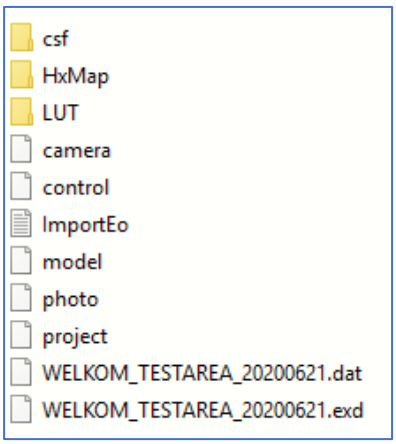
1. Under the 'ANCILLARY_FLIGHT_DATA' folder, the information below is required.



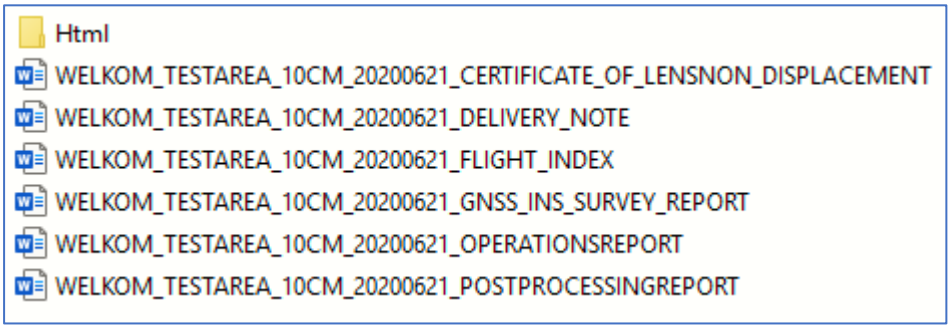
1.1 Flight_Plan_Data – this folder should entail flight plan in colour and black& white files

1.2 GPS_Data – contains gps information in the specified folders

1.3 Project_Data – this folder contains project file data required for further CD: NGI processing. The example of photo file is hugely required.



1.4 Reports – The following six reports are required signed by the project manager: 1). Certificate of lens / camera non displacement 2). Delivery note 3). Flight index 4). GNSS_INS_ survey report 5). Operations report 6.) Image post processing report.



2. CALIBRATION CERTIFICATE – This folder require camera calibration certificate
3. DIGITAL CAMERA – This folder contains the calibrated RGB and CIR images.

TEST AREA AND GROUND POINT INFORMATION

This section is an abstract from CD: NGI aerial standard (V6 dated 25 August 2021) section B2.17 Operational Test

(a) Prior to the commencement of imagery acquisition for the CD: NGI, and at any stage when the camera or IMU system has been disturbed in the aircraft, imagery of a CD: NGI approved test area shall be acquired for the purposes of an operational test. The Operational Test shall be undertaken after a successful Boresight Calibration has been completed.

(b) The test area shall be flown at a ground sample distance at optimal of 0.25m of the GSD of CDNGI acquisition program, or as specified by the CD: NGI, with the same aircraft/sensor/peripheral equipment combination as will be used in the image acquisition programme of the CD: NGI.

(c) This imagery shall consist of at least two adjacent strips, with each strip consisting of a minimum of six images with a forward overlap of between 55% and 65% and a sidelap of between 20% and 30%.

(d) The entire area shall be stereoscopically covered within the usable portions of the images.

(e) Ground control points (GCP) shall be used as supplied by the CD: NGI. The expected error, at a confidence level of 2σ, in the individual easting and northing components, after aerial triangulation, shall not exceed ±0.068m, to a maximum permissible error of ±0.10m.

(f) The expected error, at a confidence level of 2σ, in the height, after aerial triangulation, shall not exceed ±0.12m, to a maximum permissible error of ±0.30m.

(g) The following records in respect of the test area shall be provided:
   i) Plan of the test area
   ii) Co-ordinates, height and description of each GCP
   iii) Enlargements on which the GCP are clearly marked at a scale such as to allow their easy identification
   iv) All information as stipulated in paragraph B7.

(h) Should the results obtained from the imagery of the test area not be consistent with the sensor calibration data supplied nor suitable for photogrammetric or photo interpretation purposes, the Chief Director may prohibit the use of that sensor.

TEST AREA OTHER THAN THE ONCE SUPPLIED BY CD: NGI

Should a company wish to acquire test area on their preferred location:

- The pointers highlighted above and on the standard documents should be adhered to.
- The necessary information required by CD: NGI should be supplied. This is the information the CD: NGI makes available for its own test area.

CAMERA & DIFFERENT AIRCRAFT

A resolution for the test area camera and aircraft for capturing aerial imagery as follows:

- Since the purpose of the test area is largely to assess the capability of the camera to be used to capture aerial imagery, it is permissible to use on the different aircraft. However, should the tender be awarded, the test area would need to be redone using the same aircraft to be used to capture areal imagery jobs.