



FLYABILITY

ELIOS 3

October release notes

Bug fixes, new features and known limitations

October 17th, 2023

Updated E3 components versions

NEW : Drone firmware: `gaston_2023.09.swu`

NEW : Cockpit software: `Flyability-Cockpit-2023.09-release.apk`

NEW : Inspector software: `InspectorSetup-23.9.0.340-x64-Release.msi`

IMPORTANT NOTES

New updated elements

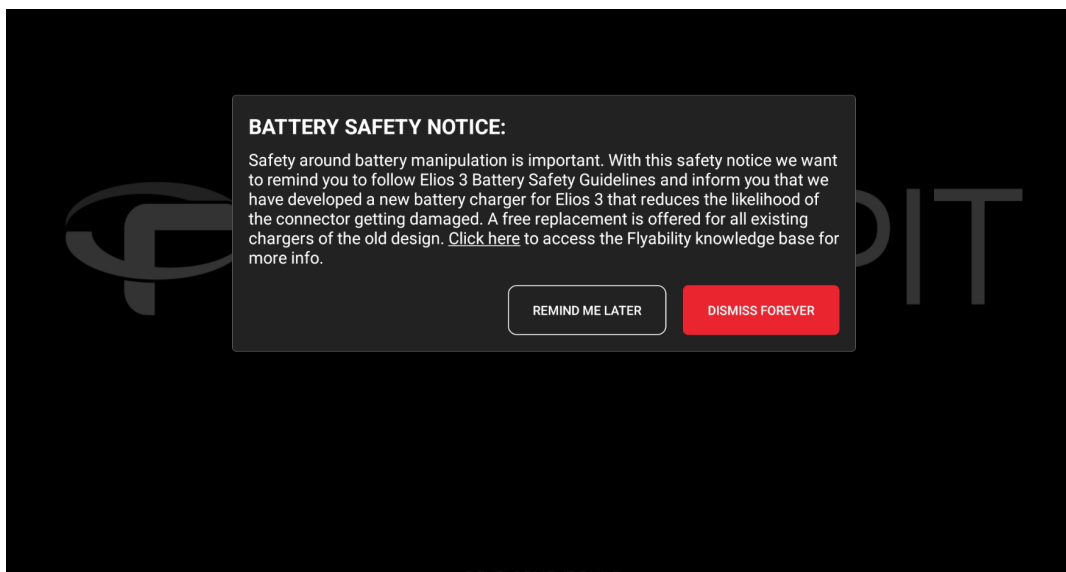
The lidar FW is updated from 2.4.2 to 2.5.2. This update takes about 5 min longer than a usual update.

What's new?

Battery safety notice

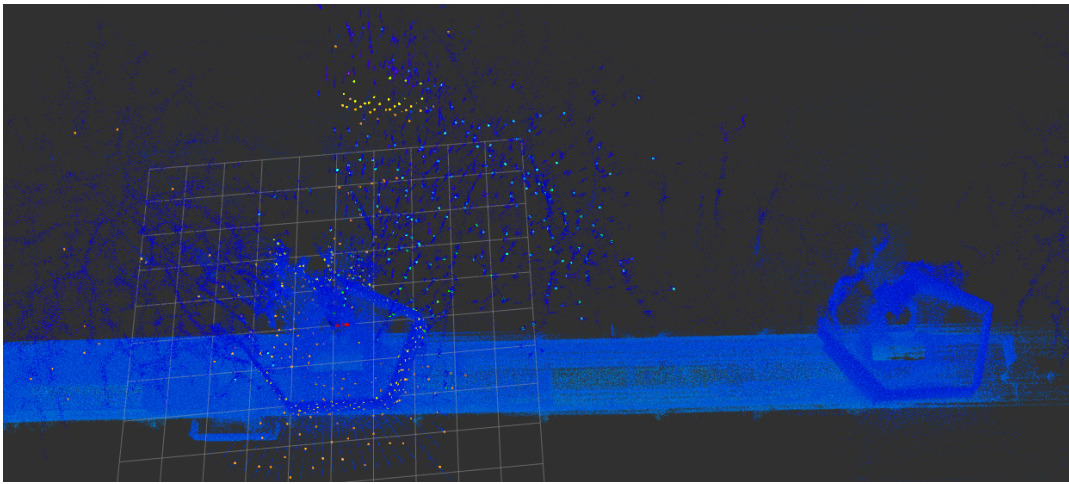
Following the email notification we have sent beginning of October 2023, we're introducing a battery safety notification to remind users to upgrade to the new battery chargers. Cockpit will display a pop up message inviting you to contact us or your reseller to get free replacement battery chargers, if you are entitled to.

Find more information on our knowledge base [👉 Elios 3 charger replacement](#).

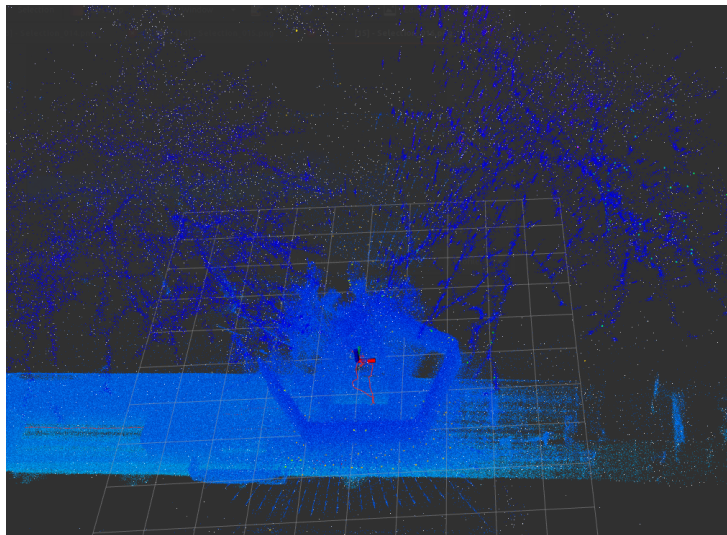


Improvement in FlyAware™ mapping accuracy

The improvement of the initialization process of the Elios 3 has resulted in an overall accuracy improvement, allowing for a reduction of at least 50% longitudinal drift in symmetrical environments. This translates to achieving up to 2.5% drift in challenging environments, as demonstrated in the example below.



Previous release : After flying back and forth in this tunnel, there is a drift of 14m, resulting in the hexagonal structure appearing twice in the map.



October release : There is no drift, the structure appears only once in the map.

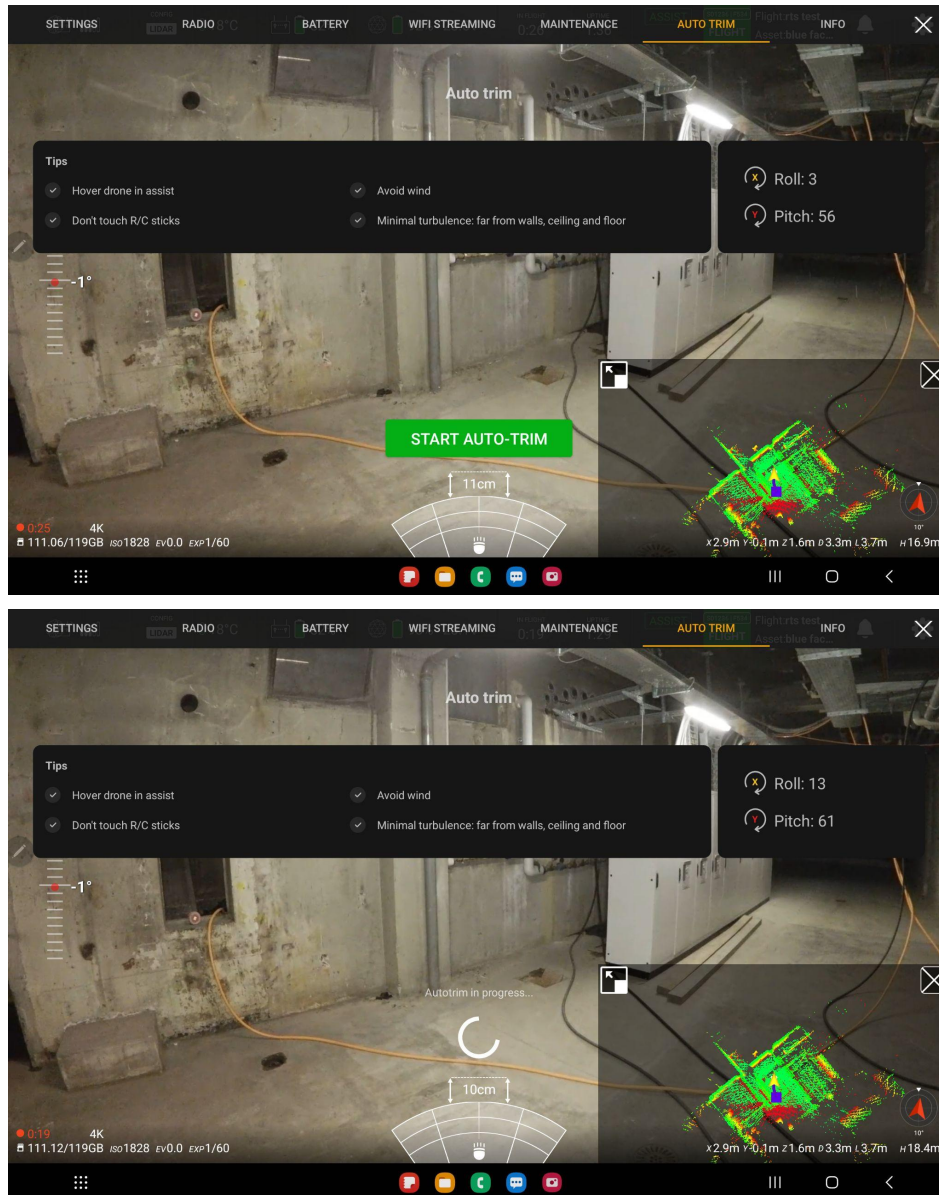
Surveying Payload compatibility

This release introduces the Surveying Payload compatibility. The Surveying Payload consists of the new Ouster OS0-128 Rev 7 LiDAR sensor which comes with a FARO Connect license for increased accuracy and precision. The drone will automatically detect whether a Rev. 7 or Rev 6 / 6.2 lidar is mounted and will update the lidar firmware accordingly if required.

[More info on the surveying payload](#)

Auto-trim panel available

An auto-trim feature has now been added to a dedicated tab in Cockpit, allowing you to trim the drone so that it has neutral stability when flying in ATTI mode. Drones shipped after October 2023 will come auto-trimmed from factory. Older drones need to be trimmed by the customer. The trim values are stored in the memory of the drone and therefore the trimming only needs to be done once now and then throughout the life of the drone, when needed.



Bug fixes

- Fixed issue that could cause the drone to lose control because of bad communication with DSM IMU
- Fixed issue where videofeed wouldn't come back in cockpit after recovering the signal
- Fixed issue where drone state estimate was wrong from initialization forward because of erroneous IMU data: added self-diagnosis on x- and y-axis of accelerometers.
- Fixed issue that would block the drone activation process through Cockpit

Known product limitations so far

See previous release notes