AltusMetrum

Release Notes for Version 1.2.1
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Version 1.2.1 is a minor release. It adds support for TeleBT and the AltosDroid application, provides several new features in AltosUI and fixes some bugs in the AltOS firmware.

1. AltOS

AltOS new features:

Add support for TeleBT

AltOS fixes:

- In TeleMini recovery mode (when booted with the outer two debug pins connected together), the radio parameters are also set back to defaults (434.550MHz, NOCALL, factory radio cal).
- Correct Kalman filter model error covariance matrix. The values used previously assumed continuous measurements instead of discrete measurements.
- Fix some bugs in the USB driver for TeleMetrum and TeleDongle that affected Windows users.
- Adjusted the automatic gain control parameters that affect receive performance for TeleDongle. Field tests indicate that this may improve receive performance somewhat.

2. AltosUI Application

AltosUI application new features:

- Make the initial position of the AltosUI top level window configurable. Along with this change, the other windows will pop up at *sensible* places now, instead of on top of one another.
- Add GPS data and a map to the graph window. This lets you see a complete summary of the flight without needing to *replay* the whole thing.

AltosUI application fixes:

- Handle missing GPS lock in *Descent* tab. Previously, if the GPS position of the pad was unknown, an exception would be raised, breaking the Descent tab contents.
- Improve the graph, adding tool-tips to show values near the cursor and making the displayed set of values configurable, adding all of the flight data as options while leaving the default settings alone so that the graph starts by showing height, speed and acceleration.
- Add callsign to Monitor idle window and connecting dialogs. This makes it clear which callsign is being used so that the operator will be aware that it must match the flight computer value or no communication will work.
- When downloading flight data, display the block number so that the user has some sense of progress. Unfortunately, we don't know how many blocks will need to be downloaded, but at least it isn't just sitting there doing nothing for a long time.

3. AltosDroid

First version of this application