AltusMetrum

Release Notes for Version 1.1

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Bdale Garbee `<bdale@gag.com>`

Keith Packard `<keithp@keithp.com>`

Version 1.1 is a minor release. It provides a few new features in AltosUI and the AltOS firmware and fixes bugs.

1. AltOS

AltOS Firmware New Features:

- Add apogee-lockout value. Overrides the apogee detection logic to prevent incorrect apogee charge firing.

- Force the radio frequency to 434.550MHz when the debug clock pin is connected to ground at boot time. This provides a way to talk to a TeleMini which is configured to some unknown frequency.

- Provide RSSI values for Monitor Idle mode. This makes it easy to check radio range without needing to go to flight mode.

AltOS Fixes:

- Fix a bug where the data reported in telemetry packets was from 320ms ago.

- Fix a bug which caused the old received telemetry packets to be retransmitted over the USB link when the radio was turned off and back on.

2. AltosUI

AltosUI New Features:

- Make the look-n-feel configurable, providing a choice from the available options.

- Add an *Age* element to mark how long since a telemetry packet has been received. Useful to quickly gauge whether communications with the rocket are still active.

- Add *Configure Ground Station* dialog to set the radio frequency used by a particular TeleDongle without having to go through the flight monitor UI.

- Add configuration for the new apogee-lockout value. A menu provides a list of reasonable values, or the value can be set by hand.

- Add Imperial units mode to present data in feet instead of meters.

AltosUI Fixes:

- Fix a bug that caused GPS ready to happen too quickly. The software was using every telemetry packet to signal new GPS data, which caused GPS ready to be signalled after 10 packets instead of 10 GPS updates.

- Fix Google Earth data export to work with recent versions. The google earth file loading code got a lot pickier, requiring some minor white space changes in the export code.

- Changed how flight data are downloaded. Now there's an initial dialog asking which flights to download, and after that finishes, a second dialog comes up asking which flights to delete.

- Re-compute time spent in each state for the flight graph; this figures out the actual boost and landing times instead of using the conservative values provide by the flight electronics. This improves the accuracy of the boost acceleration and main descent rate computations.

- Make AltosUI run on Mac OS Lion. The default Java heap space was dramatically reduced for this release causing much of the UI to fail randomly. This most often affected the satellite mapping download and displays.

- Change how data are displayed in the *table* tab of the flight monitoring window. This eliminates entries duplicated from the header and adds both current altitude and pad altitude, which are useful in *Monitor Idle* mode.