



Release Notes for Version 1.6

8 January 2015

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Version 1.6 includes support for our updated TeleDongle v3.0 product and bug fixes in the flight software for all our boards and ground station interfaces.

1. AltOS

AltOS New Features

- Add support for TeleDongle v3.0 boards.

AltOS Fixes

- Don't beep out the continuity twice by accident in idle mode. If the battery voltage report takes longer than the initialization sequence, the igniter continuity would get reported twice.
- Record all 32 bits of gyro calibration data in TeleMega and EasyMega log files. This fixes computation of the gyro rates in AltosUI.
- Change TeleDongle LED usage. Green LED flashes when valid packet is received. Red LED flashes when invalid packet is received.
- Replace LPC1114 SPI driver with non-interrupt version. The interrupt code would occasionally wedge on long transfers if interrupts were blocked for too long. This affects all released TeleGPS products; if you have a TeleGPS device, you'll want to reflash the firmware.

2. AltosUI and TeleGPS Applications

AltosUI and TeleGPS New Features

- Compute tilt angle from TeleMega and EasyMega log files. This duplicates the quaternion-based angle tracking code from the flight firmware inside the ground station software so that post-flight analysis can include evaluation of the tilt angle.

- Shows the tool button window when starting with a data file specified. This means that opening a data file from the file manager will now bring up the main window to let you operate the whole application.

AltosUI Fixes

- Show the *Connecting* dialog when using Monitor Idle. Lets you cancel the Monitor Idle startup when connecting over the radio link.
- Make *Monitor Idle* work for TeleGPS devices when connected over USB. It's nice for testing without needing to broadcast over the radio.
- Use different Windows API to discover USB devices. This works better on my Windows 7 box, and will be used if the older API fails to provide the necessary information.
- Look in more places in the registry to try and identify the installed Java version on Windows. If you install the default 32-bit version of Windows on a 64-bit OS, the Java registry information is hiding \SOFTWARE\Wow6432Node for some reason.
- Fix file association on Windows by searching for the javaw.exe program instead of assuming it is in %SYSTEMROOT%. This makes double-clicking on Altus Metrum data files in the file manager work correctly.
- When replaying a file, put *done* in the Age field when we reach the end of the file, instead of continuing to count forever.
- In the Scan Channels code, wait for five seconds if we see any packet. This is needed because AltOS now sends the callsign, serial number and flight number only once every five seconds these days.
- In the Scan Channels code, reset pending flight state information each time we change channels. This avoids having flight computers appear on multiple frequencies by accident.