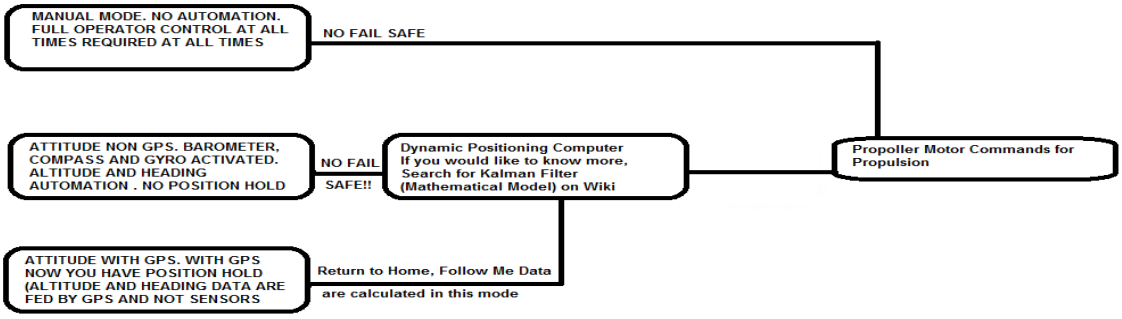
Quad Terminology:

Attitude Control: Orientation of the Quad in relationship to the earth and (in case of GPS) the satellite.

A modern Quad has many modes to suit your flying needs. But how do we remember them all in proper manner without any ambiguity or confusion? We must understand the role of individual Attitude controls in the process.

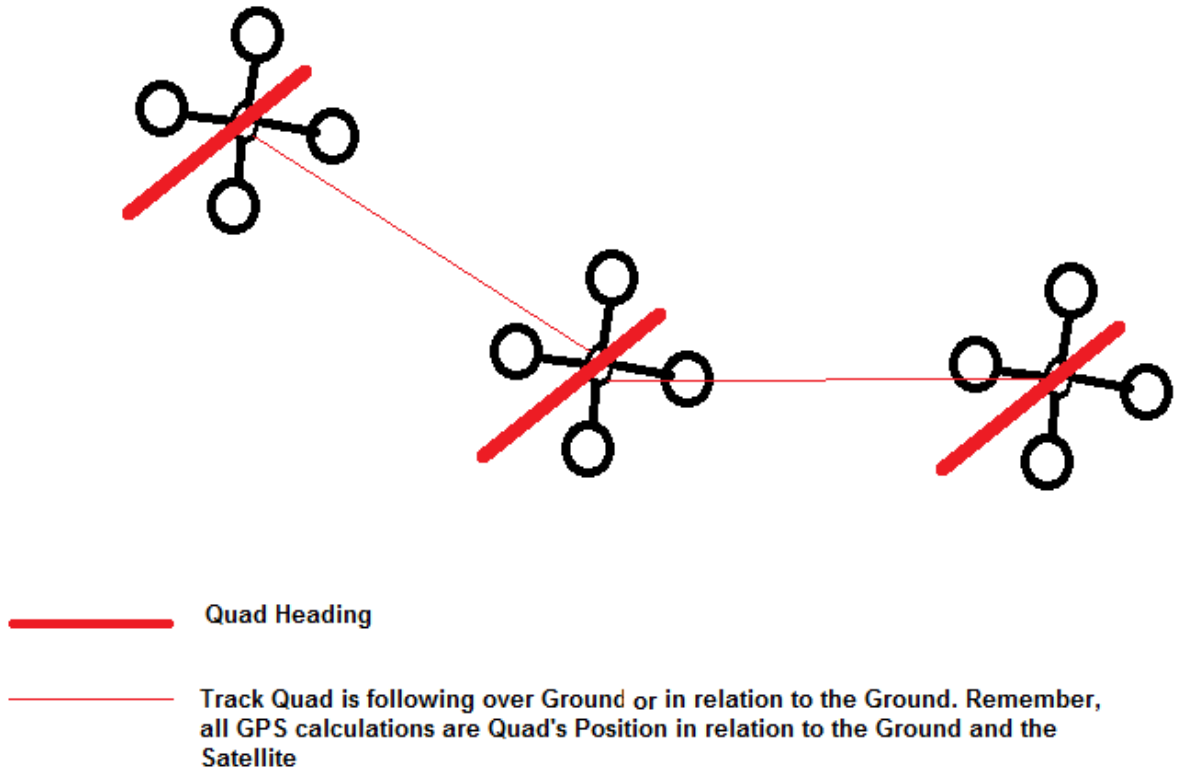


Think of this as the level of automation you require from the flight. The bare minimum is the **Manual Mode**. You must control every aspect of the flight i.e. Altitude, Heading, Course over Ground, Position Hold and Speed using Roll, Pitch and Yaw. Automation is in the Quad Stabilization only (Accelerometer).

Next one up is **Attitude (Non GPS)**. In this mode, you have the activation of Barometer for Altitude, Compass for Heading and Gyro Compass for Course over Ground. Now, you have the option of maintaining your Altitude and Heading through Automation. However, it will drift if there is wind and at times lose Altitude due to pressure variations. In Failsafe, You can Altitude and Heading Lock. NO POSITION HOLD.

Last one is **Attitude with GPS**. Altitude, Heading and Speed data is now calculated using GPS input and sensors are no longer active except Accelerometer. Now, you have Full Automation. You let go of the Throttle and the Quad tries to stay where it is. Failsafe of every kind is active.

In NAZA for example, Course Lock and Heading through Air Lock can be achieved under Attitude mode (Both Non GPS and GPS). With GPS only, one can execute Track Mode (Pre Programmed Waypoint flight).



Note:

Heading: Which direction the Quad is Pointing at

Course over Ground: Flight Track in GPS mode meaning you draw a line on your app and the Quad follows it regardless of the weather conditions..

Any Questions? Please post message or wait for the flying videos.