

# Status Report – May 16, 2019

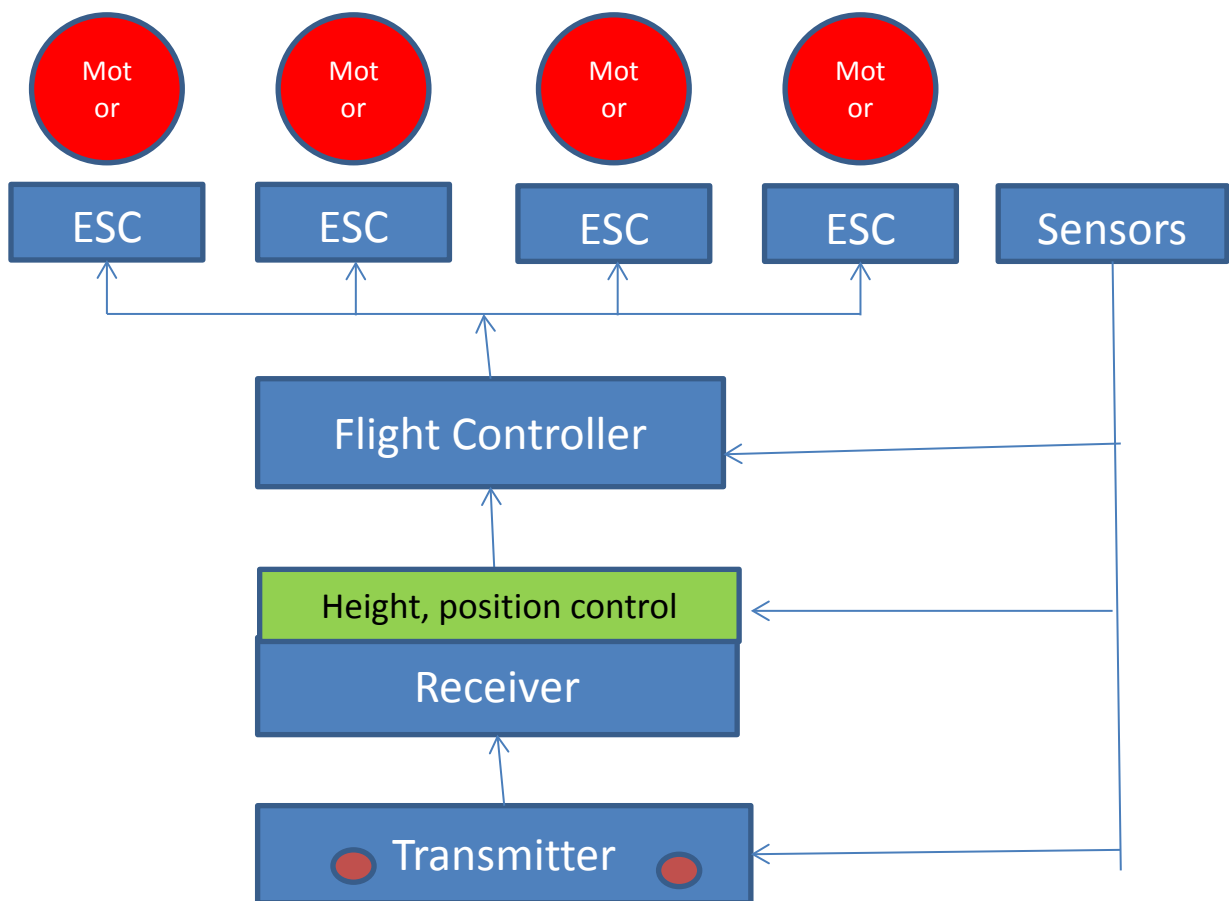
---

Progress has been slow this week. I am working on a home carpentry project.

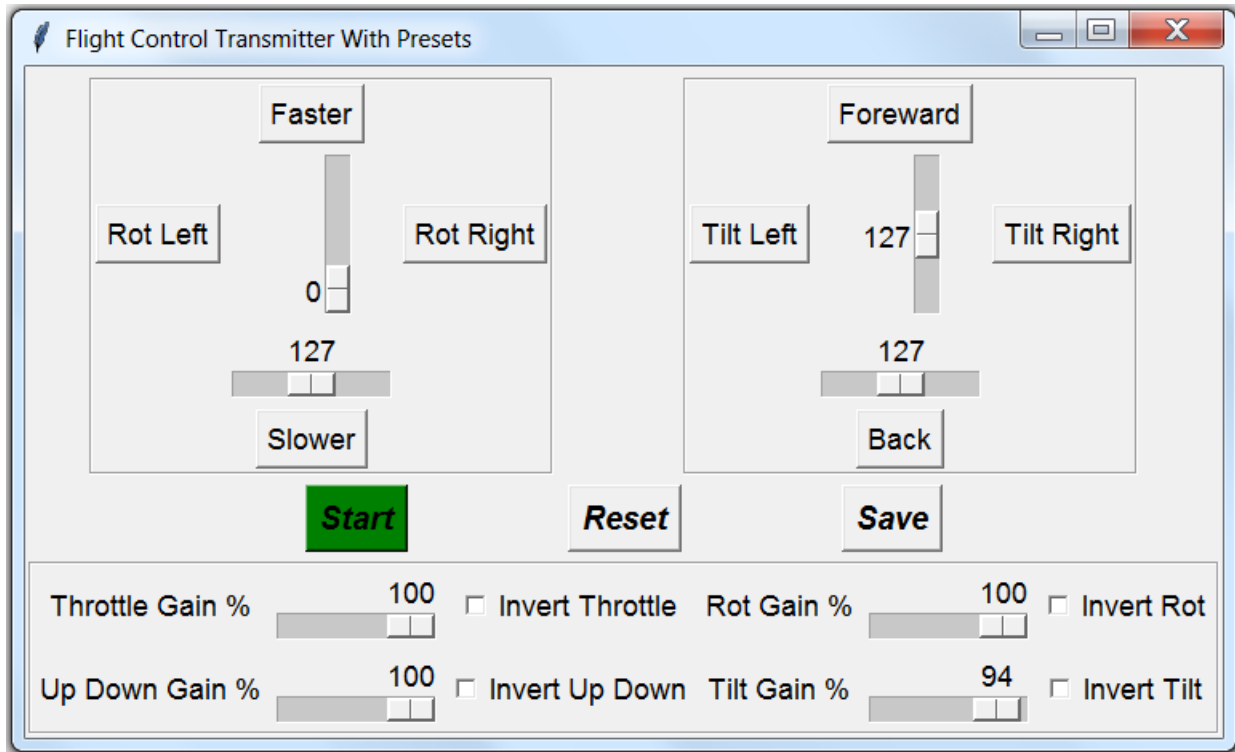
The drone is complete and flying. I have only flown it indoors. It is very sensitive to the controls. That makes sense. The overall design is, as most are, targeted to open spaces. It is close to impossible move in the horizontal plane without inadvertently moving the throttle.

I expected to find a paper on the transformation of Throttle, Tilt, Roll and Yaw (the signals the transmitter sends) to speeds of the four motors. Have not found it yet. Or if I have, the mathematics was way over my head.

To circumvent the sensitivity and the lack of a transformation I have decided to use an existing flight controller and add the height and positioning control at the back end of the receiver.



Rather than have mechanical controls, I have designed a GUI transmitter interface



The version above is for fine tuning, when this is working, I will make the operational version with the bottom panel replaced with operational controls (rise and hover at <insert value> inches, etc.