

# FLimitless

## Fly Limitlessly by Data Plan

### What do we want?

We want to achieve virtually limitless flying of a 6 propeller helicopter by sending control signals through data plan, just like how a typical smartphone can connect to the internet.

### How do we do it?

Using a modem dongle inserted with a SIM Card, we establish a connection for the microprocessor (called Raspberry Pi) to the internet. Through a laptop, we can remotely control the output of the Raspberry Pi onboard the Hexacopter so that it sends control signal to the microcontroller (called the PixHawk). This controls the hexacopter and achieves virtually limitless range.

### Who do we need?

Anyone with a passion for flying a hexacopter and wishes to get a hands-on experience. Linux and Programming skills preferable.

Garage Mentor: Chow Jeng Hei

Members: Lim Zhi Yu  
Chong Shao Heng  
Barry Yee



### Where are we now?

We have successfully been able to fly the hexacopter on a typical 2.4GHz Radio-controlled Transmitter with pre-built stability management on the Pixhawk. We have also established a stable connection of wirelessly sending test signals to the raspberry pi onboard the hexacopter.

What is left is to program the control signal for the Pixhawk to move as per user command through the laptop. It remains the greatest hurdle yet to be conquered.