**Mosquito – Notes.**

1.7.2012

1. **Main method flow:**
2. IMU\_data(imu)
3. Estimator(imu,x)
4. Get\_RC\_Sig(ppm\_in)
5. FlightControler(imu,x,ppm\_in,motors)
6. SendMototrsData(motor)
7. SendOutputData(imu,x,ppm\_in,motors)

**ISSUES TO SOLVE:**

1. **Physical issues:**
2. RC signal problems (maybe the line needs a capacitor).
3. Need to add the propellers.
4. Need to form the board on the Mosquito.
6. **Software issues:**
7. Clean the main.
8. The estimator needs to deal with angles that are bigger then 180.
9. The estimator can have non-fixed weights for the complimentary filter.
10. RC – return the status of the receiving.
11. FC – identify commands.
12. Motors – configure to full power range.
13. FC – generate PID controller and mixer for calculate the motors signals.
14. Estimator – add magno do detect the yaw angle.

1. **Ground station issues:**
2. Motors control.
3. Output from the normal form.
4. 3D estimator control.
5. Digital scope of the tilt.

**Atmel resource separation:**

I2c – reading the IMU data. PD0,PD1.

PPMIn - timer1/counter1. PE7.

PPMOut – timer3/counter3. PF0-PF4.

Synchronous timer – timer0/counter0.

Uart – uart. PD2,PD3.