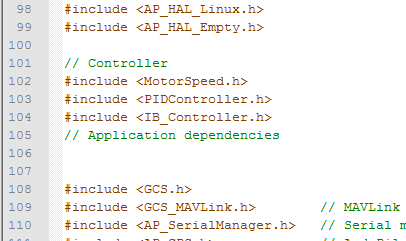
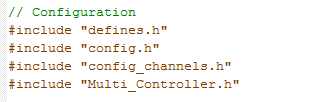
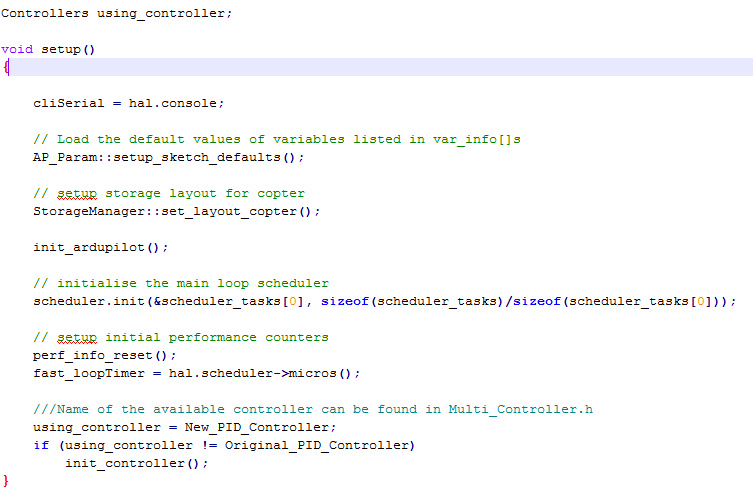
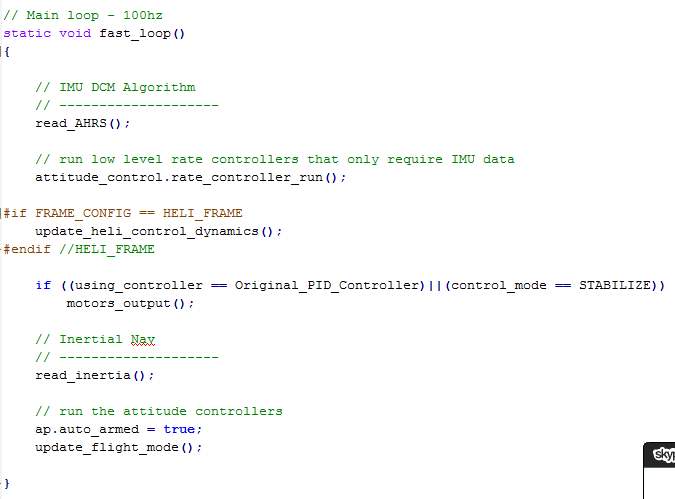
**PLEASE CHECK IF YOU CAN BUILD THE FIRMWARE FOR FLYMAPLE WITH THE ORIGINAL CODE BEFORE DOING THIS MODIFICATION**

* Copy the follow files into the **ArduCopter** directory: **Multi\_Controller.h**, **control\_multi\_controller.pde**, **motors\_new.pde**
* Copy the following folders into libraries**: PID\_Controller, IB\_Controller**, **MotorSpeed.**
* Modify the **ArduCopter.pde** as shown below

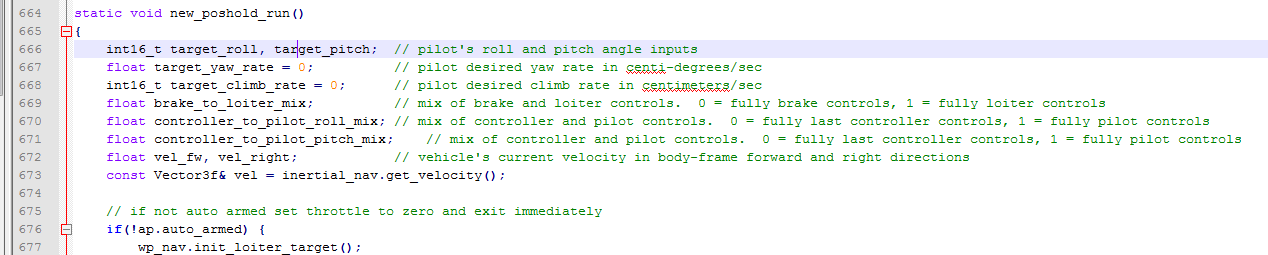


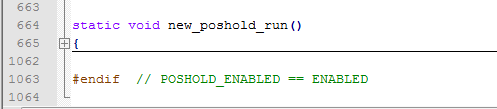




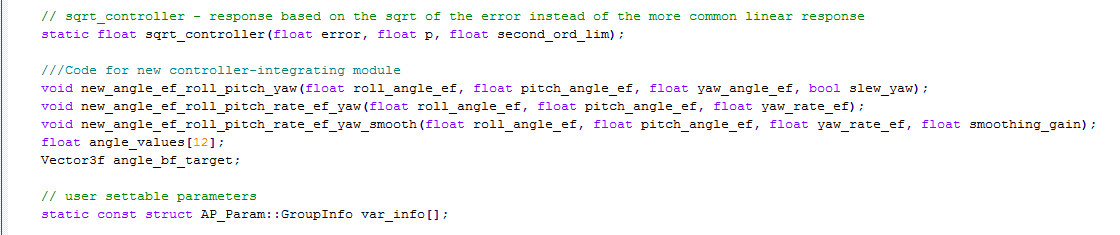


* Modify flight\_mode.pde as shown in the file new\_flight\_mode.pde. There are **new\_althold\_run()**, **new\_auto\_run(), new\_loiter\_run(), new\_land\_run(), new\_rtl\_run(), new\_poshold\_run()**.
* Copy the code of **new\_PosHold.pde** to end of control\_poshold.pde as shown below

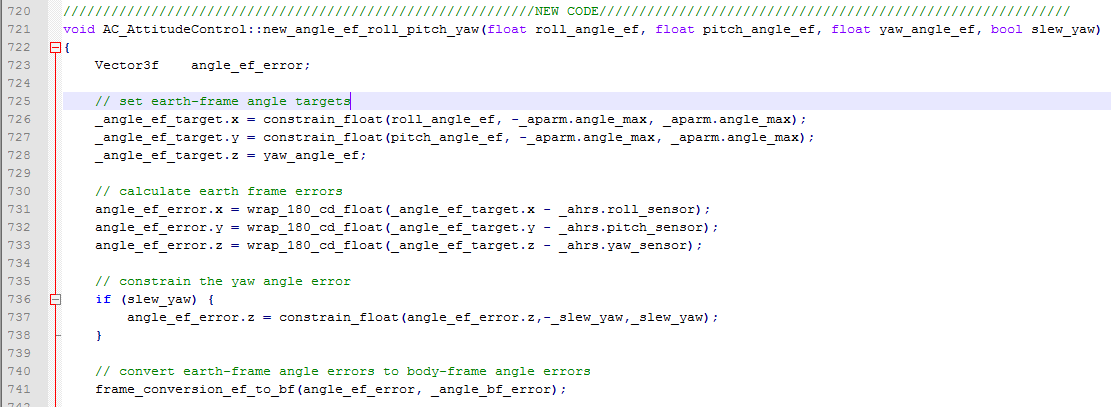




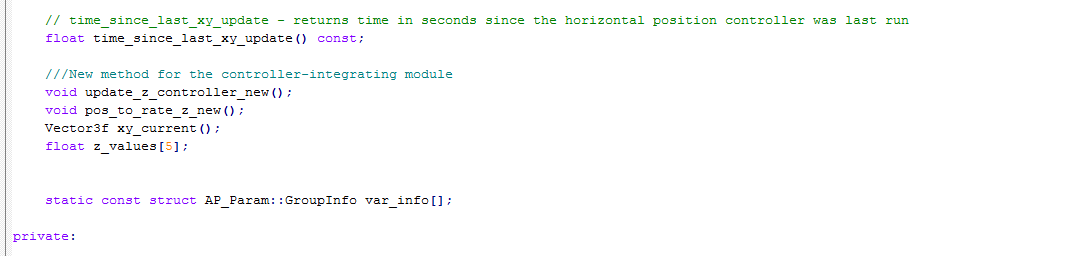
* Copy the code of **new\_AC\_AttitudeControl.h** to **AC\_AttitudeControl.h** in **libraries** as shown below



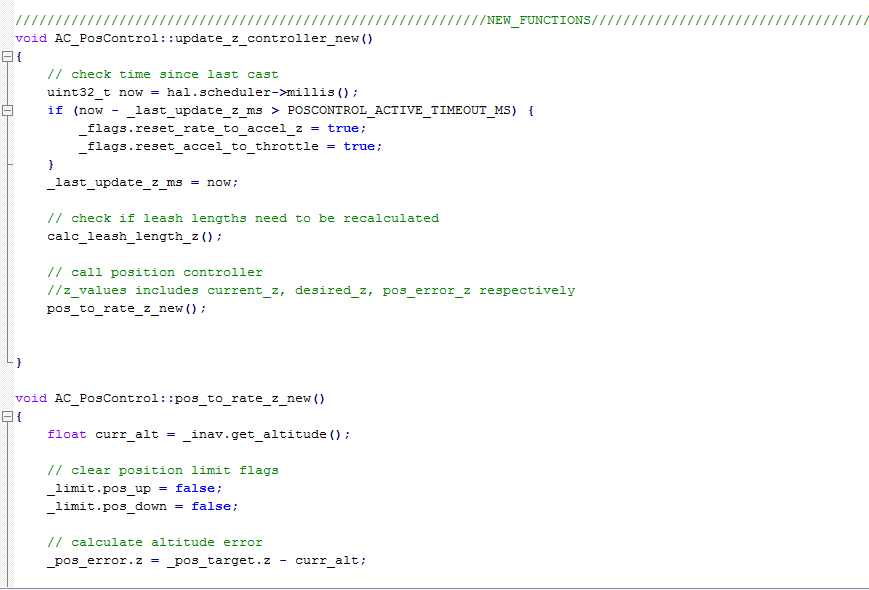
* Copy the code of **new\_AC\_AttitudeControl.cpp** (all of them)to the end of the **AC\_AttitudeControl.cpp** in **libraries** as shown below



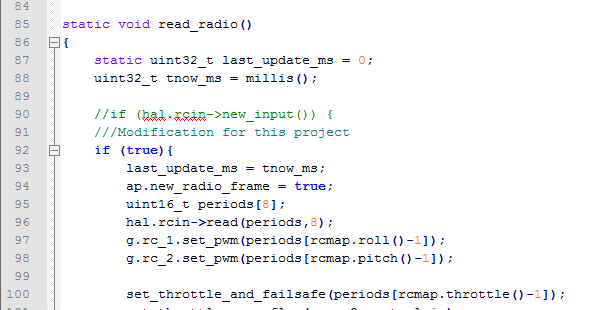
* Copy the code of **new\_AC\_PosControl.h** to **AC\_PosControl.h** in **libraries** as shown below



* Copy the code of **new\_AC\_PosControl.cpp** (all of them)to the end of the **AC\_PosControl.cpp** in **libraries** as shown below



* In case there is no RC receiver, modified the Radio.pde likes the figure below (do not need to do if there is a RC receiver)



NOW THE NEW MODULE IS IN THE FRAMEWORK AND READY TO USE.

IF THERE IS ANY ERROR, PLEASE FEEL FREE TO FIX THIS MANUAL OR CONTACT ME VIA **ahxd005@yahoo.com**