

Owner	Module	Original Source Files	Responsibility & Key Logic
Zhang	Yaw PID Controller	yawDC.cpp / .h	Implement the PID loop in Python. Use current_angle (from He) to calculate motor speed/direction.
Zhang	Elevator Control	elevator.cpp / .h	Logic for deploy() and stow(). Sequence the stepper motor movements based on system state.
Zhang	Safety & Limits	limswitch.cpp / elevator.cpp	Critical Safety: Monitor limit switches during PID or Elevator movement and trigger immediate stops.
Zhang	Aero Lookup Table	OptimalFinAngle.cpp / .h	Port getAeroFinAngle (NACA0009 polynomial). Convert Wind Speed to a target_angle.
He	Encoder (SPI)	encoder.cpp / .h	Handle spidev communication with AMT22. Provide a clean current_angle variable.
He	Pin Mapping	pinmap.cpp / .h	Map STM32 pins to Raspberry Pi 40-pin header. Initialize GPIO, SPI, and PWM modes.
He	CAN Communication	fin.cpp / hal_it.cpp	Use python-can to receive wind data and transmit system status packets.
He	Motor Driver I/O	stepper.cpp / yawDC.cpp	Interface with the DRV8835/Stepper hardware. Provide "SetSpeed" or "Step" functions for Zhang.