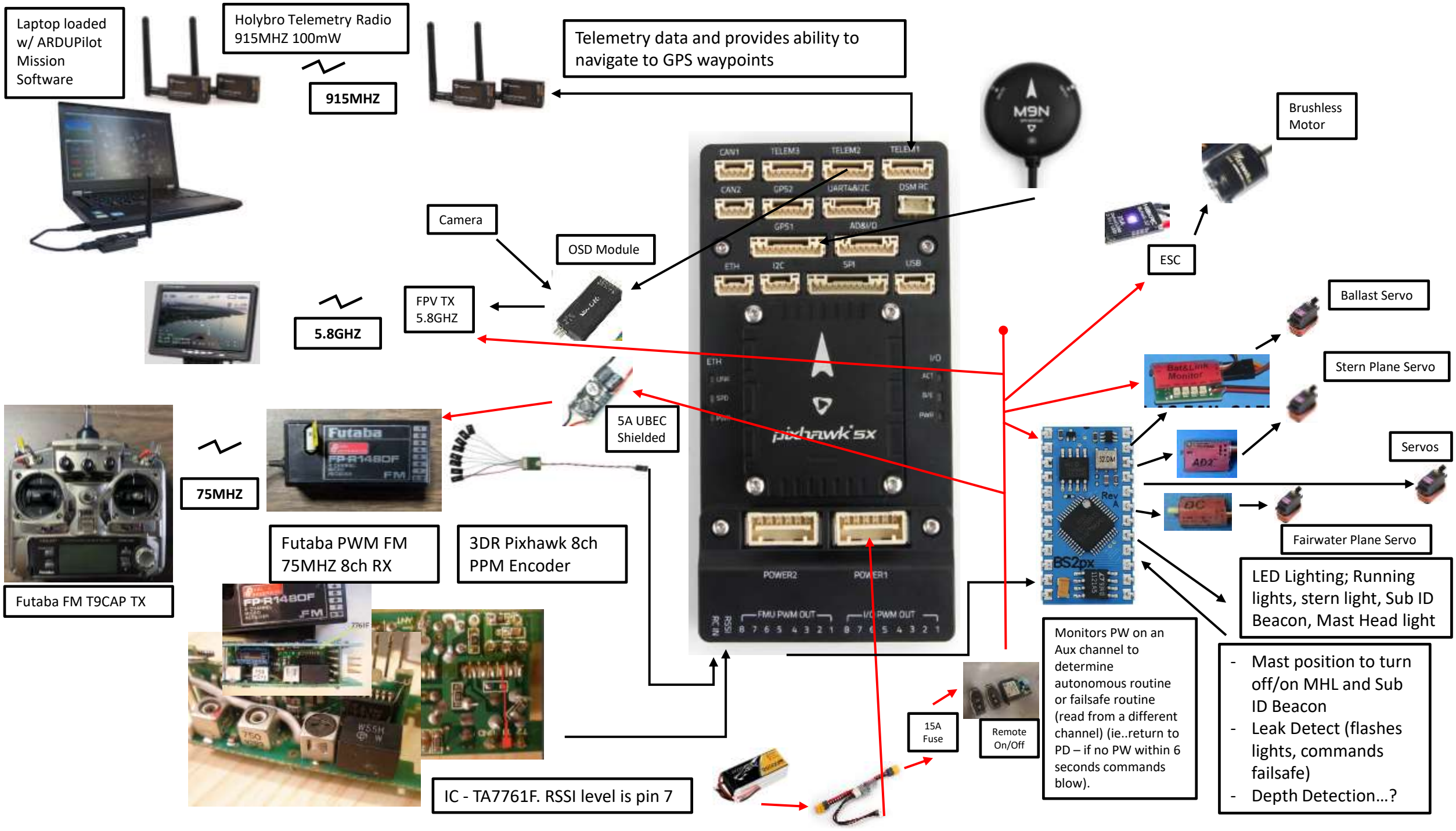
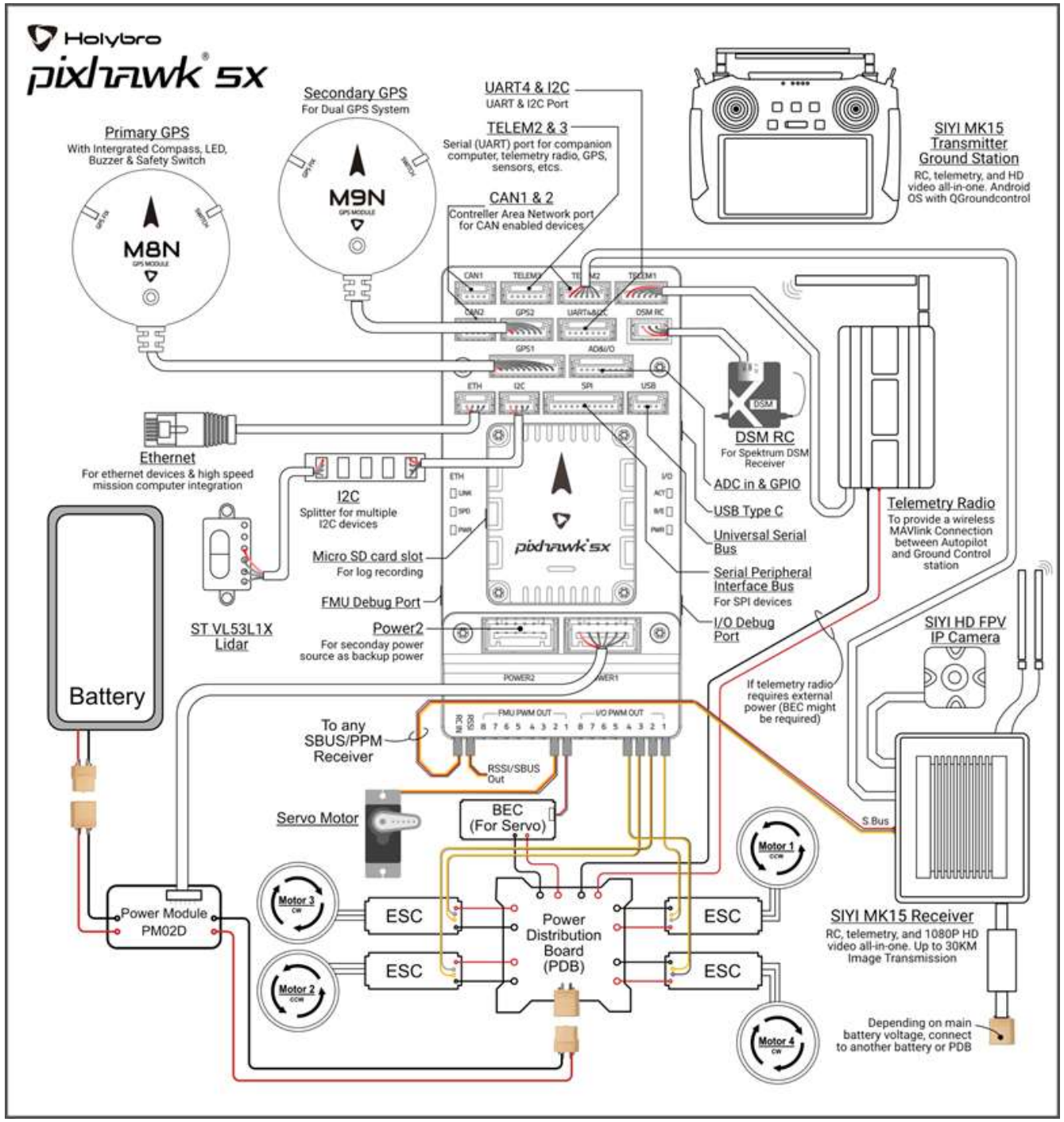

Laptop loaded w/ ARDUPilot Mission Software
Holybro Telemetry Radio 915MHZ 100mW
915MHZ
Telemetry data and provides ability to navigate to GPS waypoints
M9N
Brushless Motor
ESC
Camera
OSD Module
FPV TX 5.8GHZ
5.8GHZ
Ballast Servo
Stern Plane Servo
Servos
Fairwater Plane Servo
5A UBEC Shielded
75MHZ
Futaba
FP-R148DF
Futaba FM T9CAP TX
Futaba PWM FM 75MHZ 8ch RX
3DR Pixhawk 8ch PPM Encoder
pixhawk sx
POWER2
POWER1
FMU PWM OUT
I/O PWM OUT
Bat&Link Monitor
AD2
BS2px
LED Lighting; Running lights, stern light, Sub ID Beacon, Mast Head light
Monitors PW on an Aux channel to determine autonomous routine or failsafe routine (read from a different channel) (ie..return to PD – if no PW within 6 seconds commands blow).
- Mast position to turn off/on MHL and Sub ID Beacon
- Leak Detect (flashes lights, commands failsafe)
- Depth Detection…?
15A Fuse
Remote On/Off
IC - TA7761F. RSSI level is pin 7


Holybro
pixhawk 5x
Primary GPS
With Intergrated Compass, LED, Buzzer & Safety Switch
M8N
Secondary GPS
For Dual GPS System
M9N
UART4 & I2C
UART & I2C Port
TELEM2 & 3
Serial (UART) port for companion computer, telemetry radio, GPS, sensors, etcs.
CAN1 & 2
Controller Area Network port for CAN enabled devices
SIYI MK15 Transmitter Ground Station
RC, telemetry, and HD video all-in-one. Android OS with QGroundcontrol
Ethernet
For ethernet devices & high speed mission computer integration
I2C
Splitter for multiple I2C devices
Micro SD card slot
For log recording
FMU Debug Port
ST VL53L1X Lidar
Power2
For seconday power source as backup power
DSM RC
For Spektrum DSM Receiver
ADC in & GPIO
USB Type C
Universal Serial Bus
Serial Peripheral Interface Bus
For SPI devices
I/O Debug Port
Telemetry Radio
To provide a wireless MAVlink Connection between Autopilot and Ground Control station
SIYI HD FPV IP Camera
If telemetry radio requires external power (BEC might be required)
Battery
To any SBUS/PPM Receiver
RSSI/SBUS Out
Servo Motor
BEC (For Servo)
S Bus
Motor 1
Motor 2
Motor 3
Motor 4
ESC
Power Distribution Board (PDB)
Power Module PM02D
SIYI MK15 Receiver
RC, telemetry, and 1080P HD video all-in-one. Up to 30KM Image Transmission
Depending on main battery voltage, connect to another battery or PDB