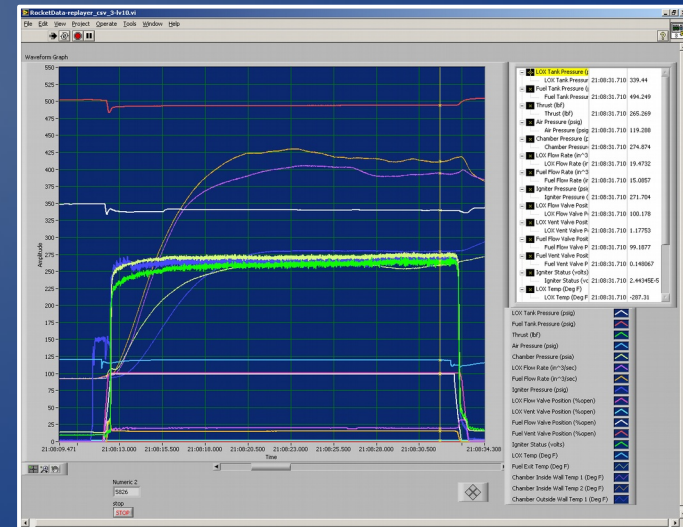
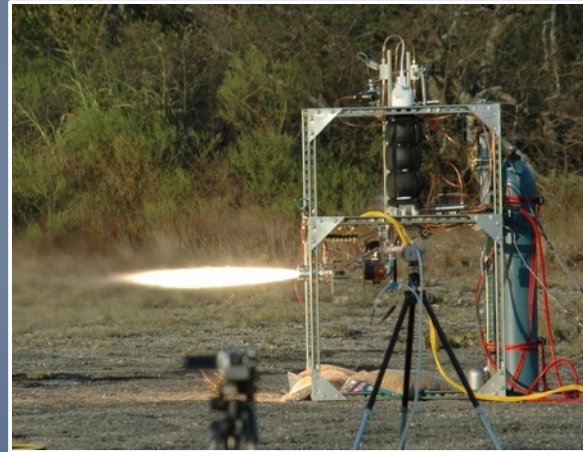
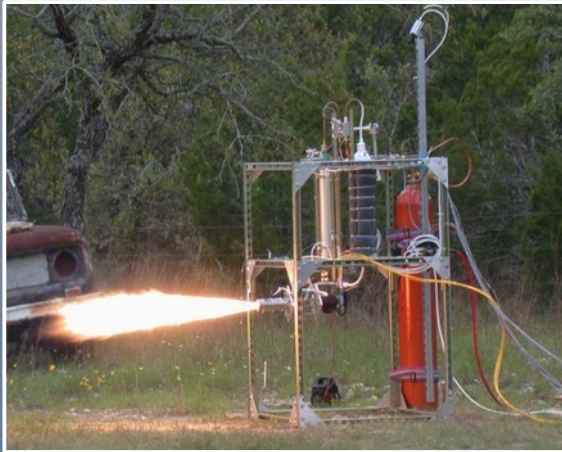


# Robert's Rocket Project

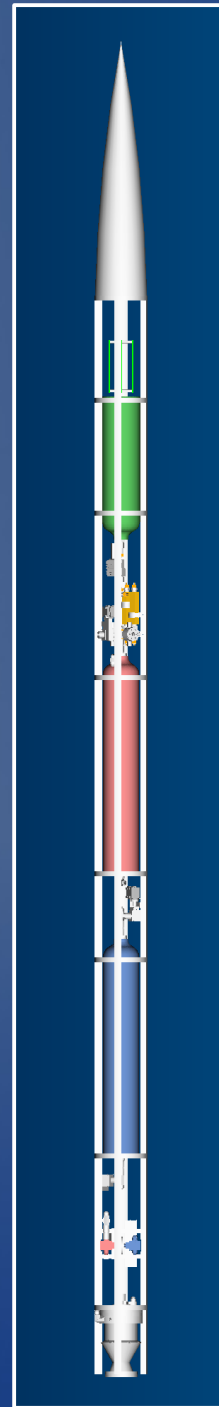
[www.watzlavick.com/robert/rocket](http://www.watzlavick.com/robert/rocket)



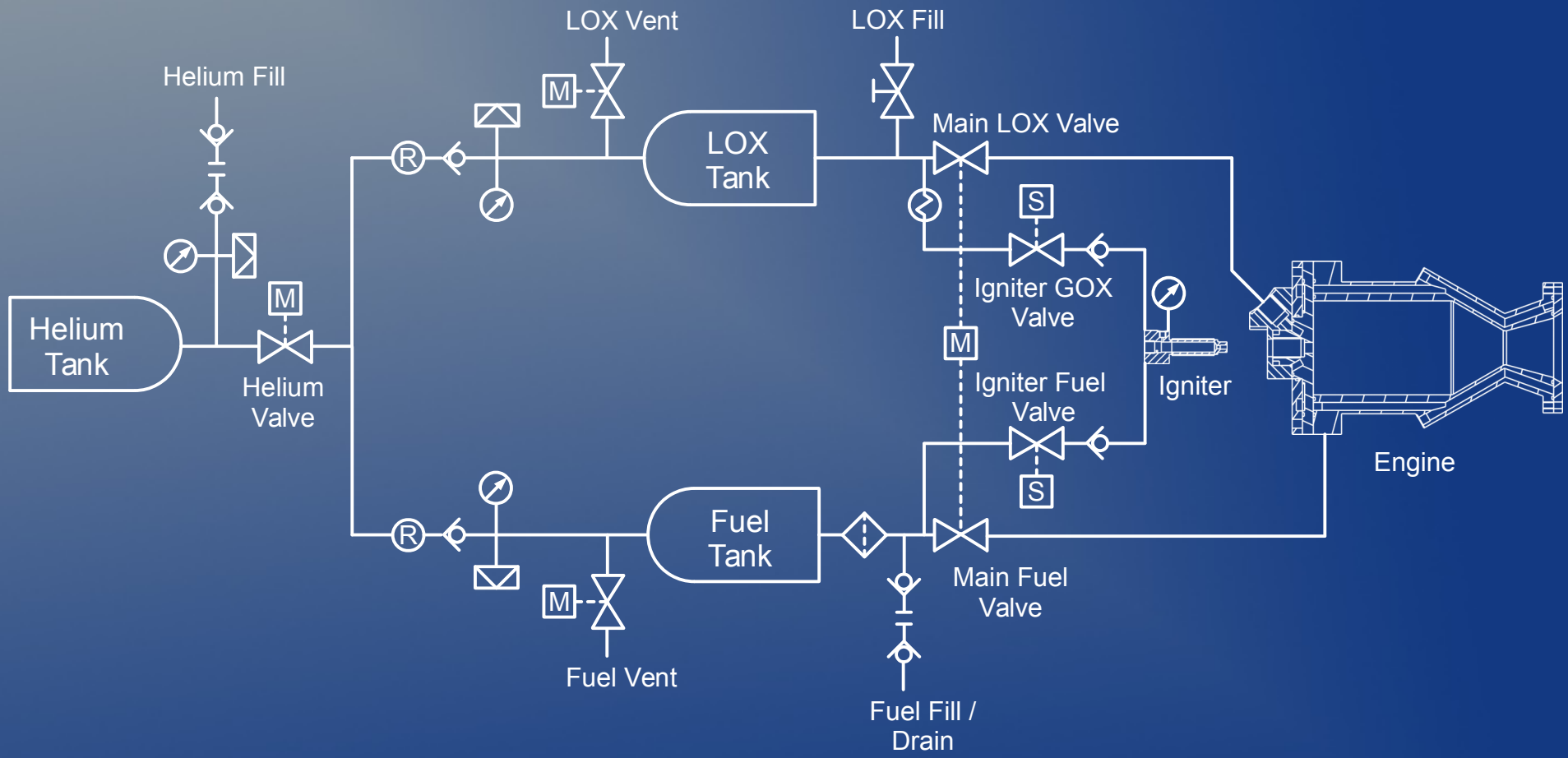
Space Access '16 Conference  
April 9, 2016

# Vehicle Overview

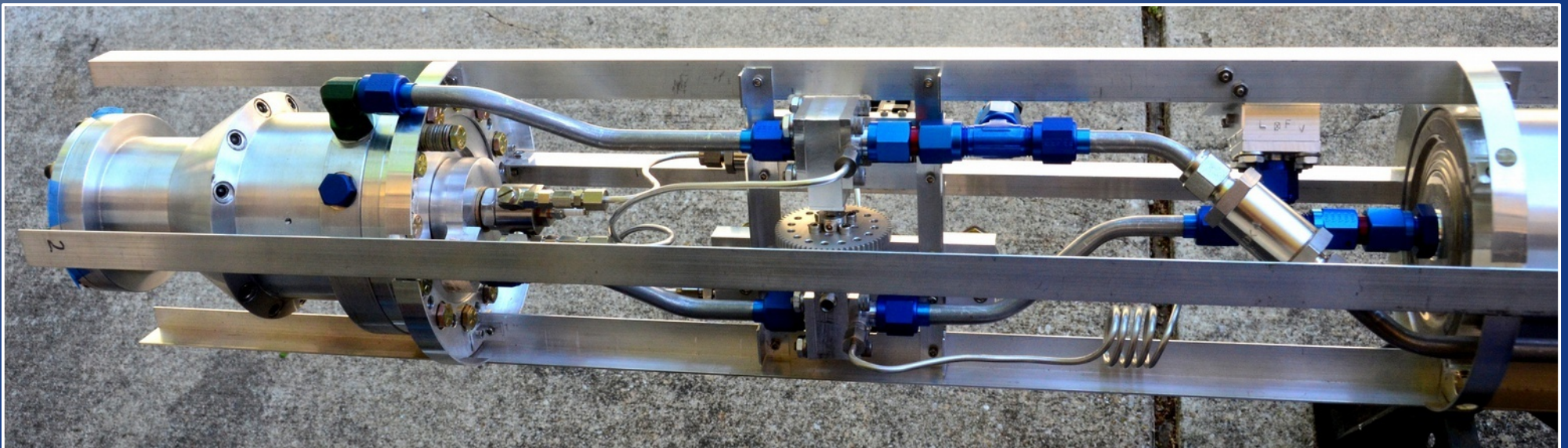
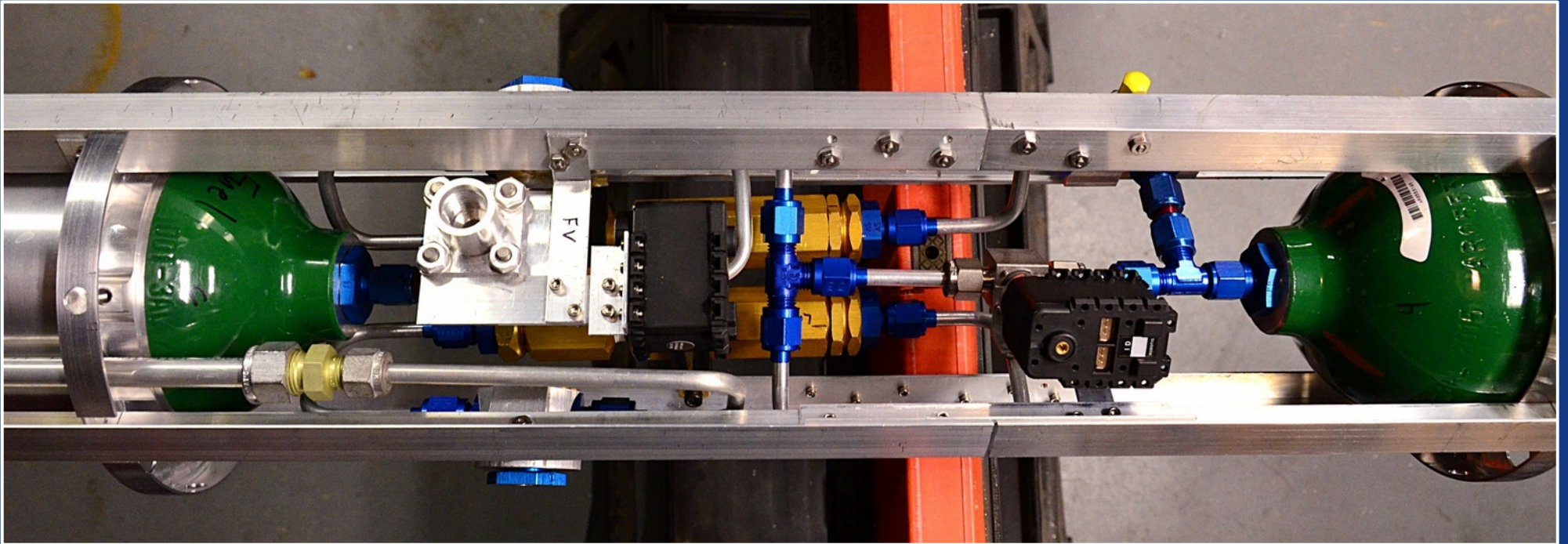
Thrust	250 lbf sea level
Propellants	LOX / Kerosene
Isp	210 s
Mass flow rate	1.19 lbf/s
Dry mass	45 lbf
T/W at liftoff	4.4
Burn time	10 s
Max altitude	16k feet
Length	~14 feet
Diameter	6 inches



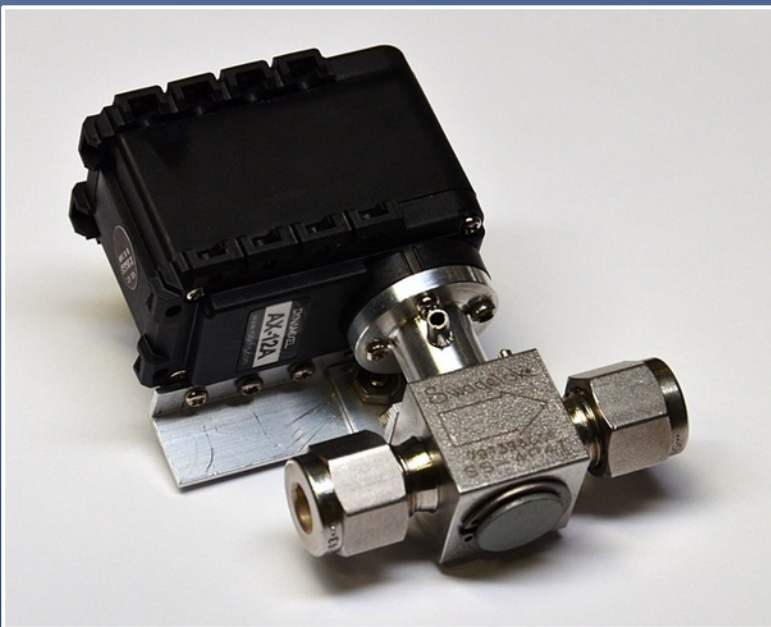
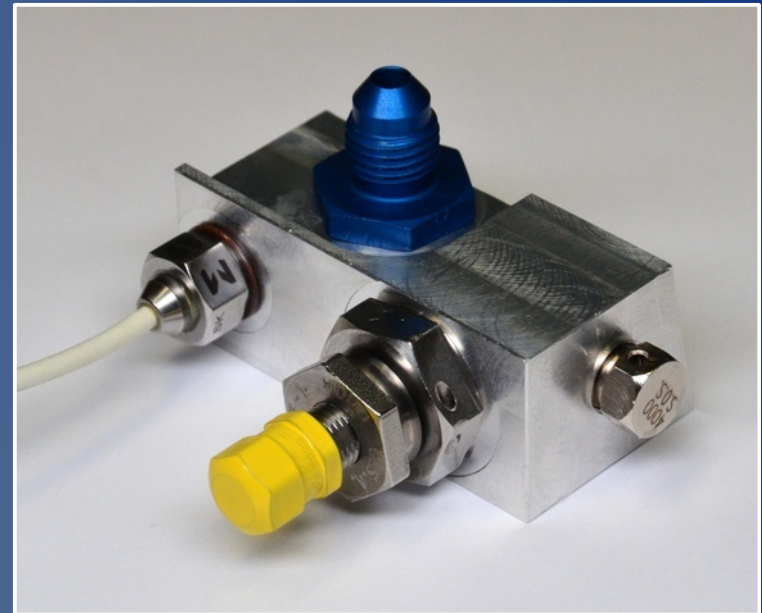
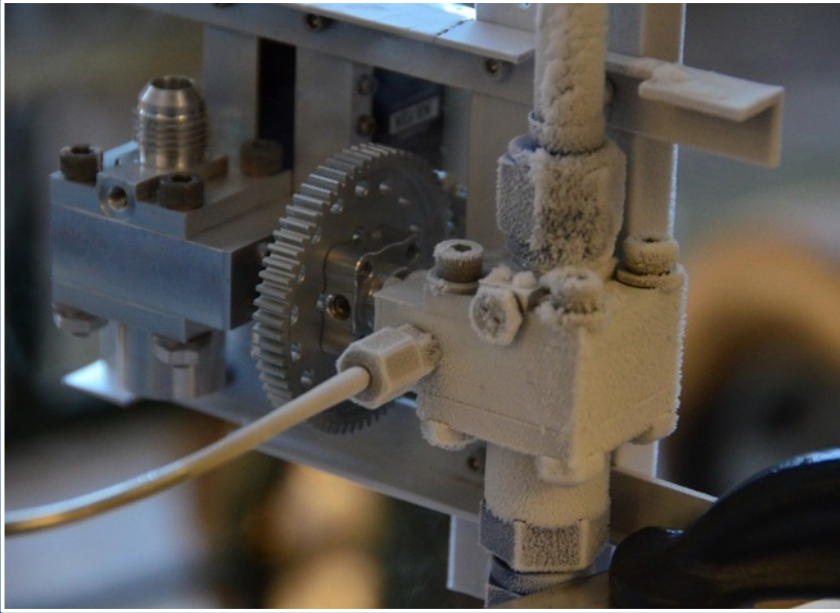
# Plumbing Layout



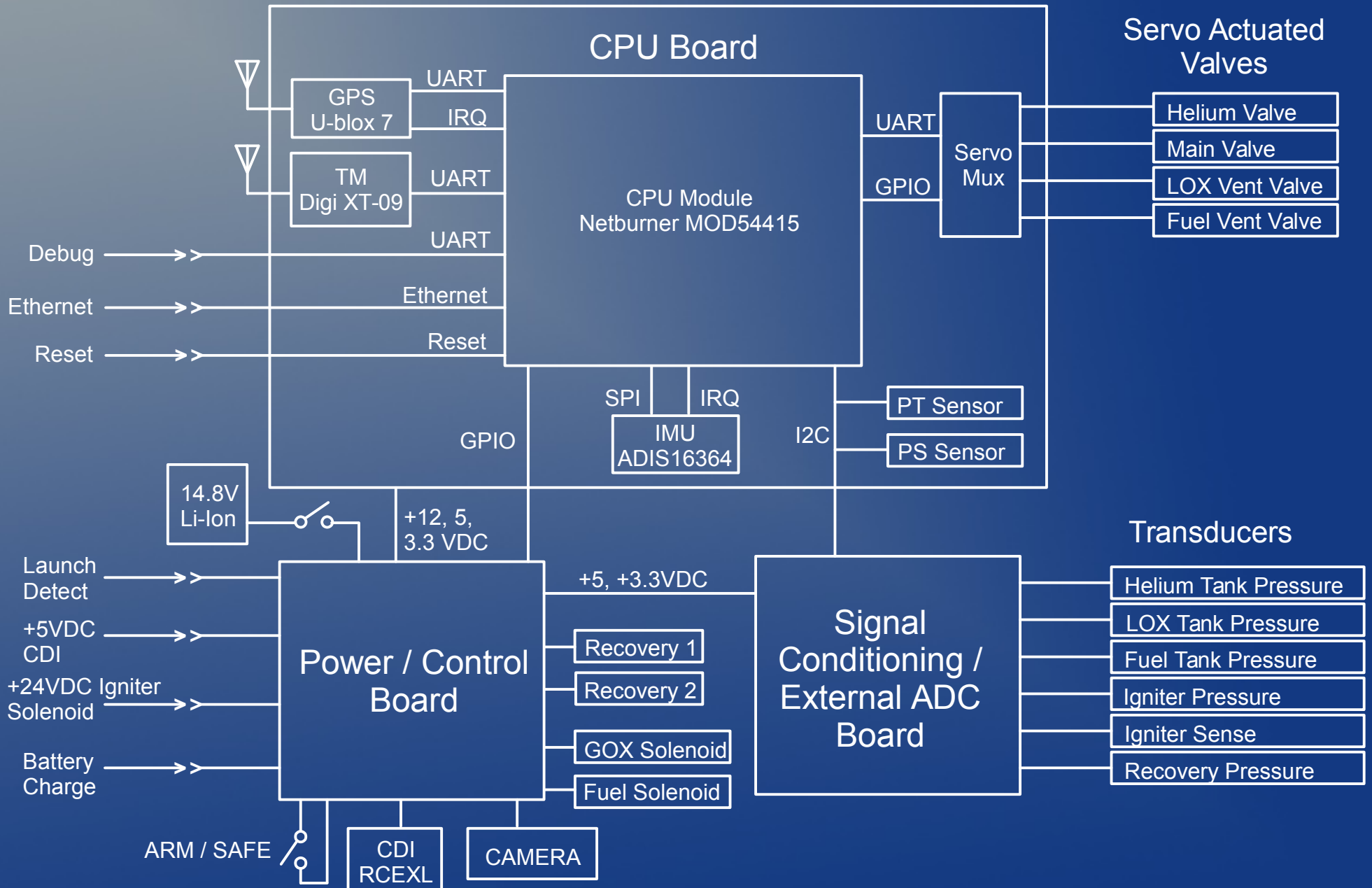
# Plumbing Photos



# Plumbing Photos

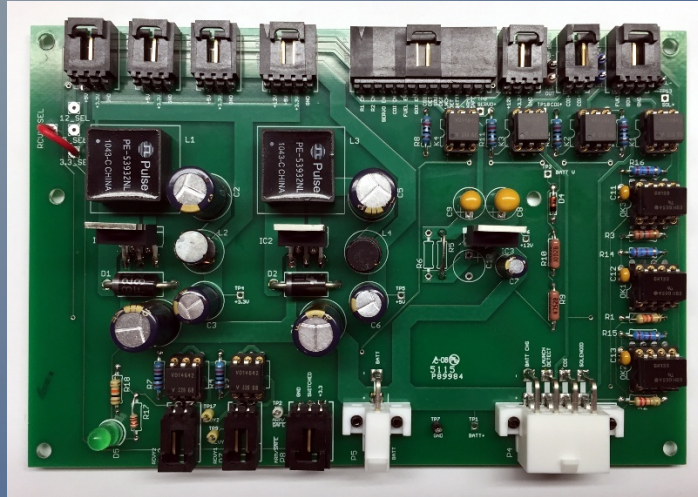


# Hardware Block Diagram

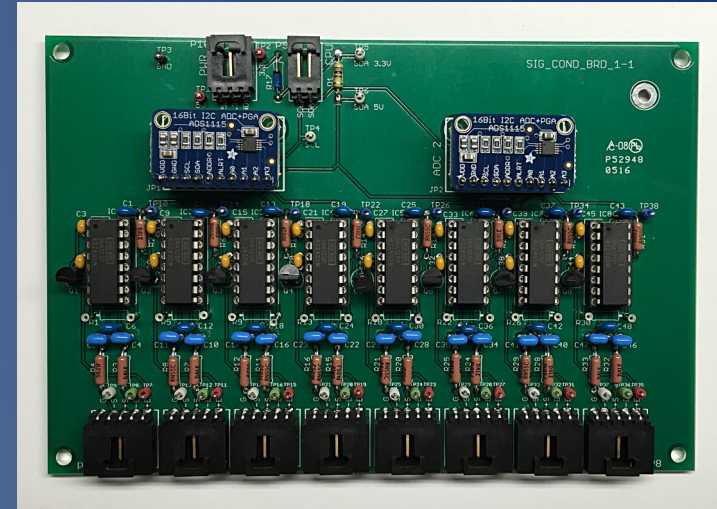


# Flight Computer

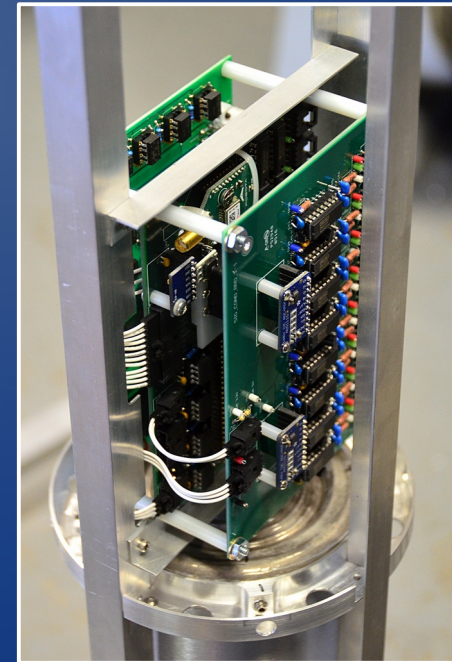
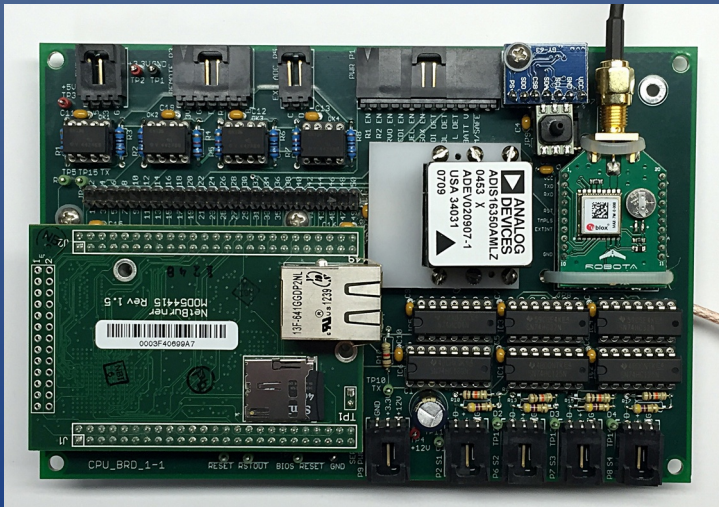
## Power Supply



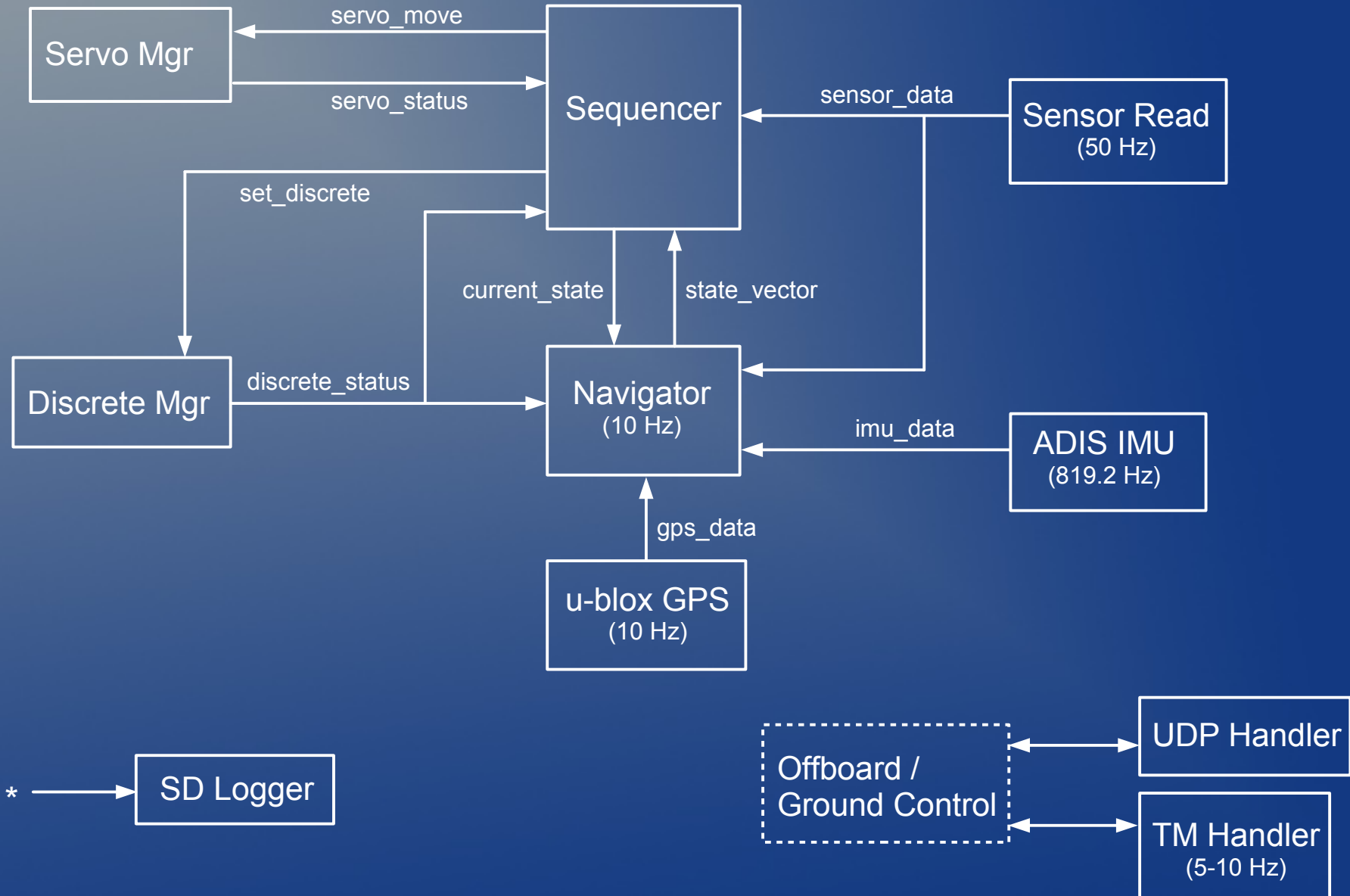
## Signal Conditioning



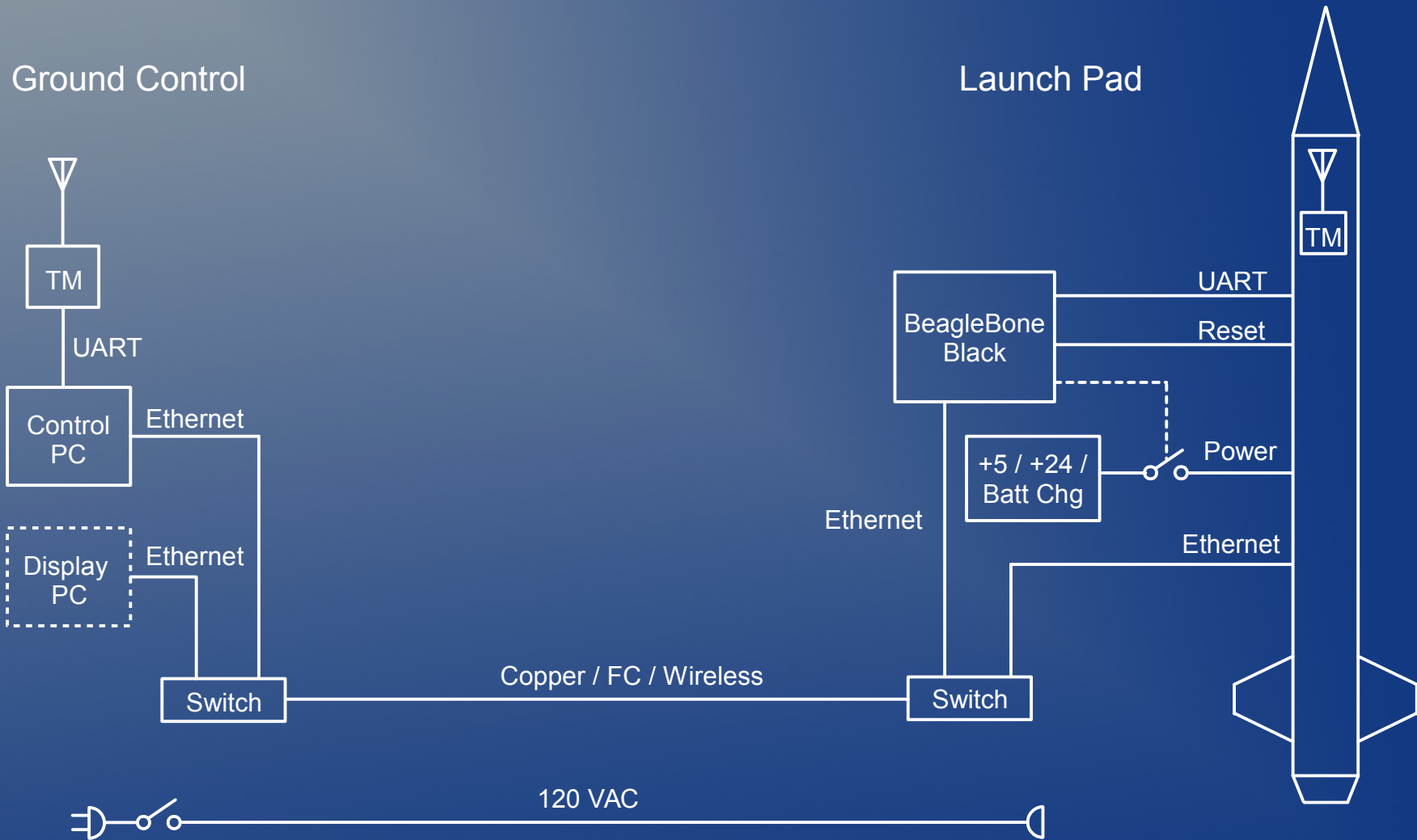
## CPU / IMU / GPS / PT / PS / TM



# Flight Software Message Flow



# Ground Support Equipment



# TODO

- Finish flight computer, vehicle wiring
- Procedure development
- Proof tests of tanks, plumbing, valves
- Water tests
- LN2 tests
- Static test
- Recovery system design, testing
- Install skin, fins
- Launch!

# Questions?

See pictures, sketches, videos at:

<http://www.watzlavick.com/robert/rocket>