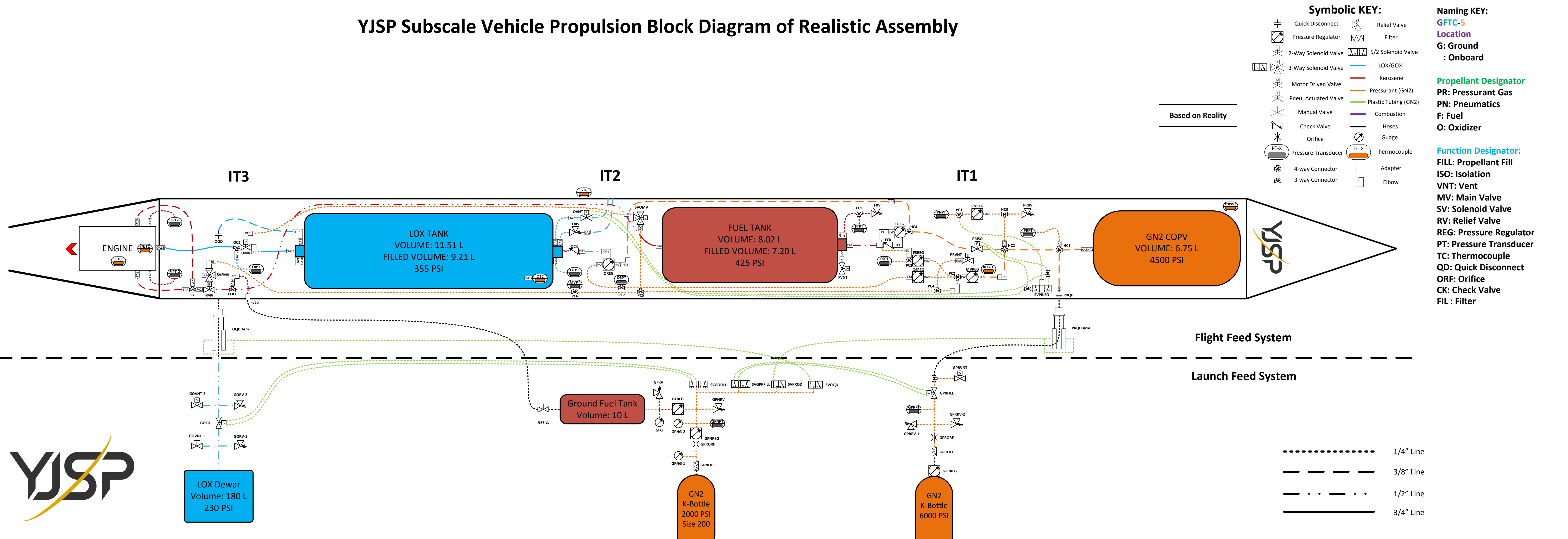


YJSP Subscale Vehicle Propulsion Block Diagram of Realistic Assembly

Based on Reality



Symbolic KEY:

- | | | | |
|--|----------------------|--|----------------------|
| | Quick Disconnect | | Relief Valve |
| | Pressure Regulator | | Filter |
| | 2-Way Solenoid Valve | | 5/2 Solenoid Valve |
| | 3-Way Solenoid Valve | | LOX/GOX |
| | Motor Driven Valve | | Kerosene |
| | Pneu. Actuated Valve | | Pressurant (GN2) |
| | Manual Valve | | Plastic Tubing (GN2) |
| | Check Valve | | Combustion |
| | Orifice | | Hoses |
| | Pressure Transducer | | Gauge |
| | 4-way Connector | | Thermocouple |
| | 3-way Connector | | Adapter |
| | | | Elbow |

Naming KEY:

- GFTC-5
- Location
- G: Ground
- : Onboard

Propellant Designator

- PR: Pressurant Gas
- PN: Pneumatics
- F: Fuel
- O: Oxidizer

Function Designator:

- FILL: Propellant Fill
- ISO: Isolation
- VNT: Vent
- MV: Main Valve
- SV: Solenoid Valve
- RV: Relief Valve
- REG: Pressure Regulator
- PT: Pressure Transducer
- TC: Thermocouple
- QD: Quick Disconnect
- ORF: Orifice
- CK: Check Valve
- FIL : Filter

Flight Feed System

Launch Feed System

-
-
-
-



LOX Dewar
Volume: 180 L
230 PSI

Ground Fuel Tank
Volume: 10 L

GN2 K-Bottle
2000 PSI
Size 200

GN2 K-Bottle
6000 PSI

LOX TANK
VOLUME: 11.51 L
FILLED VOLUME: 9.21 L
355 PSI

FUEL TANK
VOLUME: 8.02 L
FILLED VOLUME: 7.20 L
425 PSI

GN2 COPV
VOLUME: 6.75 L
4500 PSI

IT3

IT2

IT1

