Sensor for Pressure

* GPS
  + Arduino Shield: <http://www.adafruit.com/products/1272>
  + Can be modified for Arduino. Comes with a 27,000 m guarantee, likely to go higher: <http://www.adafruit.com/products/1272>
* Altimeter
  + Sold for high altitude balloons: <https://www.parallax.com/product/29124>
    - I still think we’re better off with GPS
* In general, a pressure based sensor may be better because then we can try to match our pressure to the actual pressure outside for zero lift rather than guessing what the pressure might be with charts - or we could just go as high as possible and it won’t matter.
* Look for “Honeywell Absolute Pressure Sensor” - would be good, but really hard to find desired product with specifications

Release Valve

* There are always the valves for filling party balloons, but I question how strong those are
* Electric Valve 6V, no idea if it works with helium: <http://www.mcmaster.com/#air-solenoid-control-valves/=z85t0w>

Tubing

* Rated to -100 degrees fahrenheit and 29.9 torr at 73 degrees - $3.50 plus shipping
  + We will encounter pressure down to 8 torr, so consider whether the decreasing the temperature below the measured one would increase or decrease the strength in a vacuum: <http://www.mcmaster.com/#standard-plastic-and-rubber-tubing/=z85bgs>
* Lots of varieties of plastic tubing, but none have better temperature and pressure ratings. If possible, we should test whatever we buy for durability under our specific circumstances: <http://www.mcmaster.com/#standard-plastic-and-rubber-tubing/=z85gnl>
* There is also bendable metal tubing, but more expensive: <http://www.mcmaster.com/#standard-metal-tubing/=z85jmj>
* ?

Check out this document:

<http://escholarship.org/uc/item/1vz7m8zh?query=valve;hitNum=1#hit-num-1>