**PX4Flow Power Issue**

An email from Mark on 12-12-14 about a problem with the PX4Flow:

“All,

Here are a few things that we figured out today:

1. The px4flow sensor does not work with Vicon running. We were able to see clear sinusoids in the px4flow velocity when we were moving it around manually and with Vicon off. As soon as Vicon was turned back on we stopped seeing the sinusoids. This was done with the "2" px4flow sensor.

2. We have a power issue powering the px4flow from the usb hub when the usb hub is powered by the Lipo and BEC. We noticed that with both px4flow sensors, the velocity measurements would explode up to 1e6 when amcl was running. We didn't see this issue before when testing amcl because the usb hub was being powered by an outlet and not the battery. We need to figure this problem out ASAP.

3. The new px4flow sensor, labeled with a "2" on the back of the board has much cleaner data than the original px4flow sensor, labeled with a "1" on the back. The "1" px4flow sensor has much noisier velocity data and ocassionally reads 0 velocity measurements while the "2" px4flow sensor does not. I am taking the "1" px4flow sensor home and going to look into this issue.

NOTE: DO NOT POWER THE "2" PX4FLOW SENSOR THROUGH THE USB HUB WITH THE USB HUB BEING POWERED BY THE BEC UNTIL WE HAVE FULLY VERIFIED THAT IT IS REALLY A POWER ISSUE!

NOTE: DO NOT UPDATE THE "2" PX4FLOW FIRMWARE USING QGROUNDCONTROL. We did this with the "1" px4flow. For some reason, this could be the issue that its giving noisier data.

Also this weekend I might try and find our usb hub from bestbuy or something so that we can buy another to use the wall outlet power cord since we cut up the original wall outlet power cord.

To sum things up, we were not able to successfully localize in Vicon today because of these issues. Please plan on coming in tomorrow and working on these issues. Me, Eddy, Austin and Zatz have all agreed we should meet tomorrow.

Mark”