Northrop Grumman Sponsor Meeting 2/22/16

Had to sort out the logistics of the Northrop Grumman executives meeting and presentation. Kegan and Julian will be presenting with the mechanical led team, but will transition to electrical, or vice versa.

If the mechanicals wanted to paint the frame, would they need to use conducting paint? What is the motivator for painting the structure? It would just give an extra level of cosmetic completion. Blue? NG paint code? (Not a priority for the mechanicals necessarily) It could be a good learning experience, maybe do a sample, and see how the paint builds up.

As long as we can start migrating parts over to new frame and starting installation over spring break, then it should be good. Moving RF range testing from week after Spring Break back by one week.

We can get a hold of warning labels that are necessary for industry use if necessary for an extra level of completeness. Non-commercial OSHA requirements.

The executives are going to look for how clear the methods are that we are doing. More interested in breaking the project down in a way that it flows and easily understood what we are doing on the engineering level. Only use what has purpose that can have a clear message sent for when we are giving the presentation. Anything that we are thinking about applying to the project is worth showing! March 1st, a bunch of stuff going on with HPMI (this does not involve us). An information session is on the first. At 4:30-6:30 is some bowling networking activity. Galimore Lanes. 10-12 Project team briefing, mechanical and electrical for this (Wednesday). Interviews will most likely be at this time. A lot of side conversations will probably be had. Lunch from 12-1. HPMI from 1-3. Student project presentations involving HPMI.

Pete is coming in the 28th and 29th. Arrive either Friday night or Sunday morning, probably Sunday around lunch time. Olivier and Jordan to reschedule an exam for each of them, Olivier probably for Tuesday, Jordan for Thursday. Anything we need is itemized in the table.

Ran the code on MATLAB, cal mode? Corner reflector at zero degrees from 20 feet away, then go ahead and take data. We get raw IQ data on each receive path. That will become a calibration file. If everything works ideally, then each TxRx pair receives a real value. You want your I to be the same and Qs to be zero so it is just a series a ones, so you only get a spike at DC. When you do your first measurement, then we want to see a spike right at zero. The calibration values are what you need to subtract from all of the others from the received I and Q’s. This gives us zeros. Add a GUI that has a cal button and a processing button. Center Frequency is not exactly 10 GHz, so we must tweak the theta values that we need for the signal processing.