NPOI Vacuum Manifold Capstone

Client Meeting

ATTENDEES

Wyatt (Note Taker) / Cydny / Alex

AGENDA

1. Get a tour of the work area

2. Discuss current system

3. Discuss client needs

4. If time take a light tour of the outer array

NOTES

- All of our project will be housed in the "Lab Building", this is the building with the fast delay lines and inner room.

- The current system works for now but is anticipated to fail soon

- Alot happens in the lab building and therefore there are lots of physical obstacles our design will have to navigate

- The client needs the new manifold to interface differently than the current design, it can be either in the front of the back of the tanks. The new design needs to be sturdy and last a long time. Cost optimization is a mandatory feature. Safety is number one priority, we are dealing with a lot of pressure, forces, and evacuated volume, so we need to incorporate a lot of Saffy features. We must include locations for high vacuum pressure sensors, one at the front of the tank and one at the back (we only need to worry about either the front or back

because the manifold will only be on the front or back). The pressure sensor should have a valve connection so it can be replaced without losing vacuum pressure of the whole system. If we put the new manifold in the front it would be preferable to not connect to the snoots. If we put the manifold in the back we need to accommodate the pump location so that the pump does not introduce vibration to the center concrete slap and so the plumbing does not interfere with the gantry crane movement.

- The client likes to meet once a week with the team to make sure we are on track and making good progress.

- The outer array was a fun tour. This place is really big!

ACTION ITEMS

1. Comple this information for a class presentation

2. Start to brainstorm and perform back of the envelope calculations to give some design ideas to the client before next meeting.

NEXT WEEK'S AGENDA

- Wait for presentation information to come out
- Create the class presentation
- Team meeting on Wednesday