

## ARCTIC Notes

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Attending: Alaina, Alysha, Conor, Bill, Joe, Russell, Suzanne

- 1. CCD Update -- Joe
  - It's done, and verbally meets our specs. Sent off to Mike Lesser for QA measurements. Hope for getting it next week. Not critical for us to have it for about 1.5 weeks. The curve Joe sent around is from the same coating run as ours. Ours should have a shallower drop in the red. QE drops as the chip is cooled, so we hope that they are doing measurements at temperature instead of at room temp.
  - Suzanne asks if we have any comments from John Wilson or John Holtzman. Joe says no, only that Wilson strongly recommends we get measurements for our device.
  - If Joe hasn't heard from STA by Wednesday, he will call them.
  - Is there an agreement about swapping CCDs if they get our desired coating worked out? Joe would be surprised if they honor it. We don't need to worry about it until we see our QE curve.
- 2. Dewar assembly update -- Joe
  - All parts have been cleaned, and ready for assembly in the clean room. Joe and Bill will assemble on Tuesday, pumping Wednesday. Ed is almost ready with wiring for thermal tests.
- 3. Optics quotes
  - L2 is the problem for all vendors we have queried.
  - Harold Johnson came back at 30K. They want to buy two blanks in case one breaks. Can we buy one, and hold off on the backup until it's needed?
  - Cosmo came back at a little over 20K. They say they have worked with it before, and if they break it they buy the replacement. They claim to have military and astronomical experience, but we don't know who. They can't measure curvature down to the accuracy we need.
  - NuTech is taking a long time to work out small details.
  - Suzanne is interested in seeing the quote from NuTech, before making any solid decisions.

Monday, September 22, 2014

- Will we be able to switch if whoever we go with isn't delivering? Yes, we have time for a backup. Should take about 18 weeks.
- We might contact someone at Zygo and ask about testing costs.
- We think we're ok with this schedule, but will ask Barkhouser.
- 4. Leach update -- CCD integration trip -- Joe
  - Driving on Sept 30th or Oct 1st. Hoping to get there at the same time as the CCD. If needed, Joe can pick up our chip and the engineering chip on the way. If ours is not quite ready, the engineering chip will be ok. Will know more from STA this week.
  - PO is signed, Leach says all is in order.
  - Leach estimate is 3-8 weeks. Since he is unfamiliar with our hardware, he's unsure about the time estimate. Either way, it should not harm our schedule.
  - Hope to have it finished by the end of October. Joe will drive, be there a few days, then flyback to UW. Come back to APO around Oct 20th and then will drive everything back up to UW.
  - Computer--Ask Fritz if it has been ordered. What is the estimated arrival date? It will come to APO for software installation. Then get it to Leach (Bill may be able to drive it). If not, then send it to UW.
  - Hope to have everything at UW by Nov 1st. Is that ok for Russell and Conor? They think so.
- 5. Testing of CCD after integration -- Joe and Bill
  - We wanted John Wilson and John Holtzman to weigh in on this, but they aren't here.
  - We have been discussing plans, and what is needed for commissioning.
  - Joe -- Use LED flat panel display, lamp source instead of our shutter. Is that reasonable?
  - Bill -- Could we use the prototype? Joe says yes, but would rather not.
  - Joe -- Accuracy of exposure time is not terribly important. We could add a photo diode. And Leach is willing to work out some of the kinks for us.

Monday, September 22, 2014

- Bill -- We are getting close to needing a test plan. We have time, but now is a good opportunity to plan.
- Joe -- We can get some historical data on how it behaves.
- Bill -- We will ping John Holtzman and John Wilson.

Next meeting -- Small discussion in the Thursday Tech o con, and then Monday, October 6th.