

## ADC Team Meeting

July 2, 2003

### Present

Joe Miller, David Cowley, Drew Phillips, Vern Wallace, Barry Alcott, Will Deich, David Hillyard

We will have a video meeting with Sean Adkins and others at CARA regarding our comments on the draft ADC Requirements Document, on Tuesday, July 8 at 1:00 PST. Drew Phillips will gather our comments together into a single document if they are sent to him.

### Action

Send comments on the draft requirements document to Drew as soon as possible.

### Optics

Drew has been looking at distortion and residual dispersion effects. The slit mask design software will need to design for ADC IN or ADC OUT, as there is a plate scale change of order 0.3 arcsec from center to edge, but distortion changes as the ADC extends are small (significantly under 0.1 arcsec for the ADC going from null to fully extended) and can be ignored. A review of residual dispersion shows it is less than  $\pm 0.1$  arcsec at zenith distances less than 60-deg.

David Hilyard got Quotes back from Zigo and Kodak for completion of the prism blanks that would be sawn and ground to rough dimension by Corning. In the end we would save about \$1,600 over David's original estimate for the generated blanks. He said that one of the principle differences is that we have quotes for the sawn blanks as compared to an estimate of the cost for the generated blanks.

David pointed out that a major cost savings could be had if the homogeneity specification could be reduced from  $2 \times 10^{-6}$  to  $3 \times 10^{-6}$ .

### Action

Drew will investigate the sensitivity of the image quality to the homogeneity specification.

### Mechanical Design

Vern will continue with the mechanical design. He is working with Drew Mederis of CARA on the location and nature of the defining points. He is not waiting on anything

from Drew Phillips and does not see anything that would prevent him finishing the design in the next 6 weeks.

### Electronic Design

Barry Alcott looked at most of the standards mentioned in the electronics portion of the draft requirements document. Most have to do with electronic noise radiation and pick-up. Barry does not feel that we will have any problem adhering to the standards after a quick look at copies on the web. The only problem Barry Alcott will be to prove compliance. This could possibly entail purchasing measurement equipment and/or sending the instrument out to a certification provider(!) Barry commented that a suggested scheme to ensure that motor encoder cables are attached looks like a good idea and should be fairly easy to implement.

Barry asked for, and received, permission to purchase in the fabrication phase, the expensive crimper that is used to attach the AC power cable end.

### Software

Drew Phillips has Will's comments on the requirements document. No other software report.

### Next Meeting

July 16 at 2:00 in Engineering.