

November 20, 2006 LGS Facility IPT Meeting Notes

A. Bouchez 11/20/06

Caltech: Moore, Petrie, Angione, Crome, Guiwitz, Dekany,
Palomar: Bouchez, Henning, Roberts

1. Laser diagnostics

- LLT diagnostics bench is back at Caltech.
- We need a new collimating lens for Pulnix sky-viewing mode. It has been ordered.
- Hal is working on 3 new pieces to help align LLT with diagnostics bench. We don't know if there's time to get them made in time for next run. They are enhancements. Pieces likely to be ready are a laser alignment jig & new reticle holder. The flip-out lens holder is less likely to be ready.
- Initial plan was to take the LLT bench up to Palomar next week, test in Coude lab with 589nm laser Tue-Wed, then install in LLT on Thu-Fri. However, laser problems have rendered this unrealistic. Some time during this, make changes to Coude diag. bench.
- New schedule: We will have to postpone power level testing until the first afternoon of the observing run (12/5/06). Hal and Anna will install the diagnostics bench on the LLT on Thu-Fri, as per previous plan. Anna will upgrade Coude diagnostics bench on Monday 12/4, including "leaky" mirror and motorized 660nm laser mirror.
- We have yet to understand the Pulnix-LLT alignment problem which we discovered during the October engineering run. Inside focus of the telephoto lens is clearly too long (2m), but unclear why negative lens solution didn't work.

2. Laser

- If temperature control on SFG is the main problem, then it could be fixed quickly.
- Decided to address temperature control problems on Tuesday (Renu, Antonin), then try to get laser power back up on Wednesday. Chris will drive up to Palomar Tuesday night to help Wednesday.
- Chris can come to Palomar on Tuesday night, to help Wednesday.
- Antonin will request John Henning's help for Tuesday.

3. LGS Computer

- Monitor & keyboard came in
- New parallel port driver is in place. BTO no longer has to be run as root. Testing on LGS, but no parallel port. For digital I/O, will need to buy hardware.
- John wrote driver for McShane controller.
 - Order a spare McShane controller! AB.
 - Also need spare ESP300.
- AODR - getting it working. Testing late messages between BTO and LGS. Will test today.
- Write-up of LGS computer notes -
- Need to get ADC driver working under new Red Hat.

4. BTO

- Switching between laser: Just cleaned up code for moving FSM. New motor in existing ESP300 should be very straightforward.
- Plans to work on a day schedule.
- Could write controller before run.
- Will have to develop alignment command
- Anna ordered stage. Will install Dec.
- Will not rewire FSM before this run.

- May spend some time testing AODR.
- Will test red/yellow switching on Thursday 11/30.

5. Safety

- John will come up Monday 12/4/06 to run aircraft cameras prior to observing run.