Timing System notes and To Do Nov 1 1999

No new data on micro-mechanical tuned lasers - still waiting for response from the company. (Have new number, will call)

Still waiting for parts for tunable fiber laser and for spectrometer.

To Do:

**DAQ system:** System drops pulses even at 10Hz. (Windows NT is NOT realtime). Try “release compile” Have fixed “2 state” problem in digitizer. Looks good to a couple of degrees X-band overnight (IF section only), <1 degree X-band noise.

**DAQ system:** Need to increase averages

**DAQ system:** Need to write PID loop and control actuators.

**Fiber system:** Need to move fibers to the new table, with receivers in the (Dorel) oven, long cable in the big oven. This can be done before the oven is ready.

*** PRIORITY***

**Fiber system:** Need to test transmission and directionality of fiber system. Use old laser diode, pulse with 100ns pulse. (No need to modulate at RF)

**Fiber system:** Check on status of Thorlabs DFB laser

**Other feedbacks:** Check on mechanical delay line. Check with Santec about mechanical delay. Choose best unit.

**Other feedbacks:** Extra cable - need a third oven. Can be the same as the Dorel oven.

**Other feedbacks:** Phase shifter - this is a stand alone problem. Is someone available to work on this?

**Modulator:** Need to purchase 3GHz modulator. Uniphase MZ-150-030 $5500 (old quote). Need to understand polarization requirements.

**Other questions:** We are currently working at 357MHz, due to bandwidth limits on the DFB laser transmitter. Consider 714MHz or even 2856MHz