HIRES CCD2 QE Recovery Plan

1. Work Schedule.

The last night on sky for HIRES is Sunday August 21. The following dates are first guesses for various tasks.

ASAP: Get details of oxygen handling to Paul Dill for his approval. Grant Hill has passed on his tentative understanding of the procedure, which has been provisionally approved. If we can not do this work in-situ we need to know as soon as possible.

ASAP: Confirm that we will have all parts, supplies and equipment by the time needed.

Week of August 15 (?): Gather pump and all plumbing needed. Clean if necessary and use RGA to check cleanliness. Store in clean environment.

August 22: Take whatever HIRES exposures are needed to use as a baseline to evaluate success of work. If deemed necessary and conditions are appropriate, this could include a spectrophotometric standard star observation the night before. Simultaneously check the pump and plumbing again for cleanliness. Disable autofill to allow warming. Disable dewar.watch cron job. Move pumping station into HIRES.

August 23: If dewar warm, begin pumping. Use RGA to measure initial contents of dewar. Begin baking dewar (with warming blankets?).

September 5 (AM?): Remove warming blankets and use RGA to get “after pump” measurement. Bleed in oxygen and turn on lamp.

September 6 (?): Pump out oxygen and begin cool down.

September 7 (?): Take post-oxygen soak exposures with HIRES to evaluate success.

2. Parts, Supplies, and Equipment.

Based on the schedule above, these are the items we need and corresponding dates.

August 15: Turbo pump, all necessary connecting flanges and lines.
August 15: RGA
August 18: A-decker in HIRES if standard star to be observed. Star chosen.
August 19: Warming blankets for use early following week.
August 29: Oxygen of acceptable purity for use later that week or early following week.
August 29: Warming lamp for use during oxygen soak.