



etalon holder will be replaced with plates thinner by 1/16". Machining of the new end plates is underway at UW.

- Slitmask mechanism. During repetitive testing, a slitmask very occasionally jams on retraction from the focal plane. A cam alignment modification has been decided on, and parts are to be ordered by UW. A second problem, which resulted in jamming of the slitmask elevator near the home position, has been determined to be due to distortion after repeated slitmask cycles of the tongue that guides the elevator into the home position. This has been repaired and will be remedied in the future with a damper.
- Grating rotator. A grating rotator modification designed to greatly reduce the cross-dispersion flexure is proceeding at UW. A quotation for the bearings to be added is being negotiated with the vendor.
- Baffling. Work continues on conceptual design of baffling modifications to be installed on RSS before lift.

### **Control/ PIPT**

- RSS control software development. Testing of the new PCON software on the hardware continues, including implementation of repetitive testing routines.
- RSS mechanism control documentation. Work on a new document describing the mechanism control software continues. The description of mechanism initialization was found to be particularly lacking. An audit of the current software will be done in order to determine accurately where various initialization-related parameters are being set. "Initialization required" flags for each subsystem will be developed and implemented in the software.
- RSS proposal tool/ simulator. Work continues upgrading the simulator. A second-order contamination warning graphic has been implemented successfully in grating spectroscopic mode. Work continues on extension of the long-wavelength limit to beyond 9000 Å. This has required extension of the sky spectrum into the near-IR.
- The main part of a script to easily and semi-automatically generate finding charts to SALT specification was completed and appears to be working. The remaining code to make this process nearly fully automatic is nearing completion.

### **Management**

- Schedule. A schedule of RSS tasks through Acceptance is attached to this report. The RSS lift date has been slipped by one month to July 5 in this schedule.

- Commissioning planning. Proposals received in the call for RSS commissioning proposals are under review. A commissioning schedule is being designed based on these proposals and the RSS commissioning task table. To support this, the PIPT web manager is being updated to allow for retrieval of RSS proposals from the Science Data Base by detailed RSS configuration. A tool displaying the RSS ICD data for a scheduled block has been developed, so that the scheduler implementation of several RSS sample observations may be verified.

## Activities for next month

- Optics
  - Finish repair of UV beamsplitter calcite. (KLC)
  
- Mechanical
  - Continue test of mechanisms. (SALT)
  - Machine modified LR etalon endplates. (UW)
  - Implement grating stage modifications. (UW)
  - Design work for baffling improvements. (UW)
  
- Control
  - Continue coding of new PCON/ TCS high-level control software. (SALT)
  - Continue testing new high-level software on the instrument. (SALT)
  - Work on documentation improvements. (UW, SALT)
  
- Management
  - Review commissioning proposals. (UW, SALT)
  - Verify SDB/ OCS interface for several sample proposals. (UW, SALT)

