GBT Systems Report on Project Coordination for March 1999 M. McKinnon

The position of the GBT subreflector needs to be measured with the laser rangefinders to (1) align the foci of the primary and secondary reflectors and (2) verify the motion of the subreflector for proper operation and calibration. Two methods, which place mutually exclusive requirements upon the orientation of the retroreflectors within their mounts on the subreflector, had been proposed to achieve these objectives. One method required that the limited opening angle of the retroreflectors be aligned with the feed arm lasers, and the other method required an alignment that is optimized to the ground lasers. It was decided that the ability to range on the subreflector retroreflectors from the feed arm lasers would provide more flexibility in measuring subreflector motions, particularly during the commissioning of the telescope, and that the retroreflectors should be installed accordingly.

Priorities for the 1999 RE budget were proposed. The proposed priorities are, in order, Q-band receiver, prime focus receiver 2, interference monitoring station, L-band array feed prototype, and Ka-band receiver. A meeting will be held to discuss these priorities, as well as other projects requiring RE funds.

In late February and early March, group leaders prepared schedules to complete the work on NRAO systems for the GBT. These schedules are being consolidated into an overall project schedule.

At the request of upper management, specific project milestones were identified as potential topics for formal press releases when the milestones are achieved. Some examples are point-to-point measurements with the ground laser rangefinders, complete the integration of the spectrometer into the GBT monitor and control system, first pointing observations, first laser rangefinder measurements of the primary reflector, and completion of the Q-band receiver.

Cecilia Barnbaum will be visiting Green Bank for six weeks this summer to write user documentation for the Green Bank site and various aspects of the GBT.