

National Radio Astronomy Observatory  
Charlottesville, Virginia

March 2, 1988

To: VLBA Electronics Group  
From: Dick Thompson  
Subject: VLBA Electronics Meeting, March 1, 1988

Attendees: Bagri, Balister, Beale, Brundage, Campbell, Lilie, Morris,  
Napier, Norrod, Oty, Schlecht, Simon, Spaulding, Stetton,  
Thompson, and Walker

Construction Status

In Charlottesville the assembly and wiring of racks A, B, and C for system 5 will be complete by the end of this week, and about 60 percent of the modules required for these racks are on hand. Rack A for system 6 is also assembled and wired.

The first 23 GHz front end has been tested, and is awaiting only an attenuator to set the noise calibration level. The noise temperature is in the range 55-65 K over most of the band (21.7-24.1 GHz), but below 22 GHz it is a little worse, and rises to about 100 K at the bottom edge of the band.

The 2.3 GHz front end is in final testing in Green Bank. The noise temperature is 10 K in the middle of the band. Because of the large polarizer, the system takes about 12 hours to cool to a usable level of performance, and a further 5 hours for the polarizer to reach a stable temperature. These figures are greater than those for higher frequency front ends, but are acceptable.

Serial 5 front end for 4.8 GHz is about to be tested at Green Bank. Serial 5 front end for 1.5 GHz is awaiting amplifiers from Charlottesville.

At Green Bank, the levellers for five of the 2-16 GHz Synthesizer Modules built last year have been received. Two synthesizers for the system 5 racks will be ready by mid-March.

