

**VLB ARRAY MEMO No. 294**

NATIONAL RADIO ASTRONOMY OBSERVATORY  
Charlottesville, Virginia

November 22, 1983

**MEMORANDUM:**

TO: VLBA Members

FROM: M. Balister

SUBJECT: Minutes of the VLBA Electronics Group Meeting  
on November 16, 1983

Attendees: Weinreb, Moffet, Norrod, D'Addario, Napier,  
Kellermann, and Balister.

Napier commenced the meeting by advising the group  
of his reasons for estimating the costs of the WVR's  
at 50 k\$ per unit.

Kellermann has now read most of the latest version  
of the VLBA program plan and had some comments regarding  
the Electronics contribution. He suggested some mention  
of the possibility of Pie Town as a site close to  
the VLA which would ease the microwave link problems.  
The 8 GHz program was discussed and how it would interleave  
with the JPL Neptune project.

Kellermann made a strong appeal for the lowest noise  
temperatures at the two highest frequencies. He pointed  
out that the VLB community is now using masers which  
give performance better than that proposed for the  
VLBA in 1988, even if the HEMT program proves a success.  
Balister and Weinreb pointed out that there is a trade-off  
between performance and reliability which has to be  
considered. Balister will ask Brockway for a list  
of problems that have occurred with the NRAO cassegrain  
system at the 140' in Green Bank. Very detailed records  
have been kept for several years and it would be interesting  
to discuss these at the next Electronics Group  
meeting.

AT the next meeting, plans for the microwave link  
should be discussed now that the consultant's report  
has been issued (VLBA Electronics Memo No. 1).

Next meeting is on December 14, at 1330; telephone  
(203) 797-9062.