VLB ARRAY MEMO No. 247

NORTHEAST RADIO OBSERVATORY CORPORATION HAYSTACK OBSERVATORY

13 July 1983

Minutes of the recorder group telecon held 12 July 1983 at 1430 EDT.

Attendees: Alan Yen - Toronto

Barry Clark - VLA
Ray Escoffier - NRAO
Hein Hvatum - NRAO
Rich Lacasse - NRAO
Hans Hinteregger - Haystack
Alan Rogers - Haystack
Marty Ewing - Caltech

Ray reported that the first VLBA VCR prototype unit is nearing completion and he should be able to report some error rates at the next meeting. Enough parts have been ordered for 6 units and Ray will soon be ready to discuss detailed plans for placing units in the field for tests. Ray is planning to visit Haystack to discuss the details of interfacing the VCR recorder to the processor including details of the communications protocol needed for control and synchronization. Ray mentioned that he is going to investigate the 4-head VCR as a means of reducing the number of VCR's needed for any VLBI implementation.

Hans Hinteregger reported that work on the production of MK IIIA narrow track heads is proceeding. So far no major difficulties have been encountered and a production sample should be ready for NASA review 1 Oct 83. Marty Ewing reported that the assembly of descrete VCR heads into a headstack is underway at Barger and a prototype is to be delivered in late August.

Alan Yen reported that he has been able to record 15 Mbit/sec on a standard VCR (using standard tape) by making some improvements in the symmetry of the recording waveform. This recording rate corresponds to 7 Mb/cm area density and 25 Kb/cm longitudinal density.

After some discussion it was decided that a meeting of the recorder group should be co-scheduled with the NASA review now expected to be held in early October (this would substitute for the August or September meeting discussed in the previous telecon)