VLB ARRAY MEMO No. 185

NORTHEAST RADIO OBSERVATORY CORPORATION HAYSTACK OBSERVATORY

Minutes of VLBA recorder group meeting held 15 February 1983 at 1430 EST.

- Attendees: B. Clark NRAO
 - H. Hvatum NRAO
 - H. Hinteregger Boulder
 - A. Rogers Haystack
 - A. Whitney Haystack
 - B. Rayhrer JPL
 - M. Ewing Caltech
 - R. Lacasse NRAO
 - C. Walker NRAO
 - K. Kellermann NRAO

The meeting started with a brief review of the development of narrow track heads for the longitudinal recorder. Benno reported that Barger is having difficulty obtaining head chips from Japan. Hans reported that while the prototype heads made with VHS "gapped" bars work well there is a problem in arranging for the purchase of "gapped" bars with anything but the standard VHS production gap pitch. If gapped bars with the desired pitch are not available from Japan blank bars could be patterned at Haystack using the newly acquired precision dicing saw. It is clear that we need to improve our communications with the Japanese.

The meeting continued with a discussion of the recorder to processor and recorder to I.F. interface. Some consensus was easily reached with agreement on the following points:

- 1) An Astronomy format should be defined independent of recording system in accordance with Marty's memo #142.
- 2) The Astronomy format should provide self-contained data packets which contain the time (with CRC check) and origin of the data.
- 3) There should be a recording format (at the physical level) which would be recorder specific and need not be specified until the choice of a recorder is made.

These followed a discussion of 3 and 4 level sampling and the need to resolve whether or not to support special format modes. In addition the subject of the bandwidths and sample rates that need to be supported came up. Hein appointed a sub-committee of Rogers, Clark and Ewing to resolve these issues. This sub-committee is scheduled to telecon at 1630 EST on 28 Feb 83.