

NORTHEAST RADIO OBSERVATORY CORPORATION
HAYSTACK OBSERVATORY
WESTFORD, MASSACHUSETTS 01886

13 September 1984

Area Code 617
692-4764

Minutes of VLBA Recorder Group Held 12 September 1984 at 1600 EDT

Attendees: Ken Kellermann - NRAO
Hein Hvatum - NRAO
Craig Walker - NRAO
Paul Sebring - NRAO
Jon Romney - NRAO
Ray Escoffier - NRAO
Alan Rogers - Haystack
Hans Hinteregger - Haystack
John Webber - Haystack
Bill Petrachenko - Haystack
Marty Ewing - Caltech

Tests of Thinner Tape

John Webber and Hans Hinteregger reported that initial tests of 0.6 mil thick T-160 cassette tape made on the Honeywell 96 with half inch adapter, produced higher SNR (by ≈ 3 dB) and tracking performance as good as the standard one inch wide 1.2 mil thick tape. Some 0.8 mil thick by one inch wide tape samples are expected soon. If the thinner tape performance holds up with further tests it might provide the VLBA with longer record times - perhaps 24 hours per tape.

Recorder/Processor Interface

Further discussions of the recorder/processor interface will take place at Caltech on 26 or 27 September 1984.

Other Items Discussed

- a) Phase switching to reduce the effect of D.C. offsets in sampling: The maximum switching rate requirement needs further study. In addition, should the switching be undone at the DPS or the processor?
- b) Permutation of channel to record track assignment: If possible, the permutation switching should result in no loss of data. Further study is needed.
- c) Variable phase sampling: A study of the cost and complexity is needed.