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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

WESTFORD, MASSACHUSETTS 01886

Area Code 617 692-4765

14 March 1985

To:

VLBA Data acquisition and Recorder Group

From:

Alan B.E. Rogers

Subject:

Minutes of VLBA Acquisition/Recorder Group Meeting held

13 March 1985 at 1600 EST.

Attendees: Jon Romney

- NRAO John Benson - NRAO - NRAO Ray Escoffier Craig Walker - NRAO - Caltech Marty Ewing - Caltech Ted Seling - Caltech Dave Fort John Webber - Haystack Hans Hinteregger - Haystack Bill Petrachenko - Haystack Alan B.B. Rogers - Haystack

Pulsar gate

After much discussion it was decided that a study is needed to find a way to implement a pulsar gate. The Haystack group will study the cost and complexity of including pulsar gating function in the DPS.

Slow playback speed vs multiple pass processing.

The technical difficulties of slow playback are already known. Slow playback speeds result in lower SNR virtually independent of the tape speed during record. While Haystack will study the cost and complexity of providing two playback speeds it is unlikely that a playback tape speed slower than 67 inches per second can be provided. Since the maximum tape speed is limited to something between 300 and 1000 inches per second (more tests are needed to determine this speed) the slowdown factor is likely to be limited.

If only one playback speed is provided, multiple pass processing could provide an alternate means of achieving the same result. In addition, the ability to support multiple pass processing leads to added flexibility needed for certain "special" (hopefully not too frequent) experiments.