MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

WESTFORD, MASSACHUSETTS 01886

10 January 1985

Area Code 617 692-4765

Minutes of VLBA Recorder/Acquisition Group Telecon held 9 January 1985 at 1600 EST.

Attendees: Ken Kellermann - NRAO, Greenbank

Larry D'Addario - NRAO, Charlottesville Jon Romney - NRAO, Charlottesville

Craig Walker - NRAO, VLA
Marty Ewing - Caltech
Tim Pearson - Caltech
Dave Fort - Caltech
Alan Rogers - Haystack
Bill Petrachenko - Haystack
John Webber - Haystack

The meeting continued the discussion of design decision questions already discussed at a meeting held at MIT on 4 January 1985.

Recording Speed-up and Slow-down Factors

More discussion of the Haystack proposal to support record speeds of 67, 135 and 270 inches per second and a playback speed of 270 inches per second did not expose any significant problems. The optional addition (with extra cost) of a playback speed of 135 inches per second will be studied and performance evaluated.

Efficient Encoding of Samples Quantized to 3-levels

Craig Walker pointed out that the decision not to provide the efficient (8 bits/5 samples) encoding of 3-level data might result in additional costs in the data processing and archiving systems between the processor and image processor by forcing most continuum experiments to use 2-level quantization. Alan Rogers agreed to further study the cost and complexity of including the efficient 3-level encoding in the formatter and DPS. It was suggested that a cost and complexity analysis also be done for the data processing system which shows the added cost for using 2-level in most continuum experiments.