

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
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10 May 1985

Area Code 617
692-4765

To: VLBA Recorder/Acquisition Group
From: Alan E.E. Rogers
Subject: Minutes of VLBA Recorder/Acquisition Group Telecon held
8 May 1985 at 1600 EDT

Attendees: Tim Pearson - Caltech
Dave Fort - Caltech
Marty Ewing - Caltech
Larry D'Addario - NRAO
Craig Walker - NRAO
Ken Kellermann - NRAO
Jon Romney - NRAO
Alan Rogers - Haystack
Hans Hinteregger - Haystack
Alan Whitney - Haystack
Bill Petrachenko - Haystack

The meeting discussed the preliminary proposed VLBA format described in Acquisition Memo #40. The discussion started with questions like - what is a syndrome? (answer: the residue after dividing the received code word by the generating polynomial - if the result is zero the received signal was a valid code) and a Barker Code? (answer: a code whose autocorrelation peak is $2^n - 1$ and sidelobes are either one or zero).

The meeting continued with a discussion of the merits of "windowed" threshold detection of the sync word as a means of positively detecting frames which may be out of sync.

Marty Ewing mentioned that the correlator group is considering the development of a 24×8 matrix switch gate array which might also have application in acquisition and playback systems.

The meeting concluded with some discussion of the new cost estimates for the recording and data playback systems. Alan Rogers promised to have the Haystack Design and Cost Estimate Report in the mail by 10 May 1985 and suggested that a review of the report by National Radio Astronomy Observatory will be needed.