

VLBA ACQUISITION MEMO #231

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

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13 December 1990

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To: VLBA Recorder Group
From: Alan E.E. Rogers
Subject: Minutes of the VLBA Recorder Telecon held 12 December 1990 at 1300 EST

Attendees: Jon Romney - NRAO Charlottesville
Ray Gonzales NRAO Charlottesville
Ray Escoffier NRAO Charlottesville
Barry Clark NRAO Socorro
Durga Bagri NRAO Socorro
Ken Stetten NRAO Socorro
Jack Campbell NRAO Socorro
Craig Walker NRAO Socorro
George Peck NRAO Socorro (visiting Haystack)
Ed Nesman Haystack
Jon Hargreaves Haystack
Ken Wilson Haystack
Hans Hinteregger Haystack
Viet Tran Haystack
Alan Rogers Haystack

Parallel reproduce module status

Jonathan H. reported that additional modules are under construction and should be ready by the end of January. Tests have now been made - 4.5 Mb/sec/track playback into the Haystack correlator (using the "Navy VLBA playback drive") and some minor changes to the equalizer are required to improve the performance. It was also found that it might be advantageous to change a component value in the D.C. restoration circuit which is operating at a rather low signal level in the 4.5 Mb/sec/track case. Nothing has been found to suggest that any changes are needed for the 9 Mb/sec/track VLBA playback rate.

Clock recovery module status

Ed Nesman and Ken Wilson reported that additional boards are now being fabricated and should be ready in January.

Recorder controller firmware

Roger Cappallo reported that his firmware update is going well and should be ready soon. It was agreed that NRAO will pick up the S-record file via computer network (using FTP).

Clarification of the number of playback systems

A total of 6 playback systems are now built or in construction. One of these is the first kit which has been assembled in Socorro. It was agreed that 2 parallel reproduce modules and a clock recovery module will be supplied by Haystack for this kit. The modules will not be in kit form and will be complete and tested. Also, it was agreed that the second kit will be supplied without write electronics (the write electronics having been supplied with the first kit).

"Old" items now owed NRAO (for pre-production and 1989 production)

- 3 data buffers (for formatters 2-4)
- 3 parallel reproduce modules (for the playback drives, 1 and 2)
- 1 Clock recovery module (for playback 2)

The clock recovery module and 1 parallel reproduce (using the new PC board) will be shipped on or before 15 January 1991.

Thin tape update

Alan Rogers and Hans Hinteregger reported that we are now hopeful that Ampex will correct the problem with their thin tape. 3 tapes (1 unused, 1 which packed poorly and 1 which was OK) have been sent to their Opelika plant for evaluation. Details of the problem are given in Acquisition Memo #229.