

VLBA ACQUISITION MEMO #261

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HAYSTACK OBSERVATORY

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20 June 1991

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To: VLBA Data Acquisition Group
From: Alan E.E. Rogers
Subject: Minutes of Recorder Telecon Held 19 June 1991 at 1300 EST

Attendees: Socorro Charlottesville
D. Bagri J. Romney
B. Clark
W. Junor Haystack
P. Napier H. Hinteregger
G. Peck A. Rogers
C. Walker

The major subject discussed was how to get the recording system to provide 12 hours per tape. (See VLBA Acquisition Memo #253 for technical considerations.) The main conclusions of the discussion were:

- 1] Continue with the plan to operate the VLBA with D1 tape on 14-inch reels.
- 2] Step up the evaluation of Sony, Ampex, Maxell and 3M tape.
- 3] Try to acquire (with small purchase if necessary) enough 3M 13-micron tape to evaluate in interim operations.
- 4] About 600 tapes will be needed by mid-1992 in order to support operations. Therefore, we have to work towards a goal of procuring a large quantity of tape late this year.
- 5] Work to incorporate improvements like higher head efficiency etc, which allow enough margin to increase the linear density.
- 6] If necessary, accept plans (like that proposed by Peter Napier) to support operations with 10.5 hours/tape with extra tape changes.
- 7] Consider a transition to M1G heads and D2 within a five year period. (The VLBA operations budget plan is for 20% tape replacement/year.) MIG heads being fully compatible with both D1 and D2 tape.

Other discussion centered on the experience with thin tape which has not all been good. While few problems have been seen at Haystack, there are clearly conditions (reported from Europe and Pie Town) that produce a "bumpy pack" and severe tape damage. The exact causes and unfavorable conditions are currently being investigated. We may require better tape handling procedures, transport and firmware changes. Hopefully we will be able to understand and fix the problems.