

VLBA ACQUISITION MEMO #314

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To: VLBA Data Acquisition Group
From: Alan E.E. Rogers
Subject: Minutes of VLBA Recorder Telecon held 10 June 1992 at 1300 EDT

Attendees: Charlottesville Haystack
Dick Thompson Hans Hinteregger
Craig Walker Jim Levine
Socorro Alan Rogers
Barry Clark Alan Whitney
Clinton Janes
Peter Napier
Jon Romney
Ken Stetten

1] Barrel Roll

Barry Clark clarified the limitations of the barrel roll implementation by asking:

- a) Can the data buffer be connected before the barrel roll?
- b) Can the system track assignment be made after the barrel roll?

Jim Levine pointed out that the barrel roll design is simple and was as much as could be included, at the time of the design, within the available remaining space on the boards. Jim added that it is unlikely that a simple wire change could be made to move the data buffer connection ahead of the barrel roll as the parity, CRC insertion and conversion to NRZ-M are done after the barrel roll. Craig Walker and Alan Whitney suggested that real time fringe checks be done with the barrel roll turned off. Peter Napier asked for a study (within one month) to answer Barry's questions. The study will be done at Socorro, calling Jim or others at Haystack for consultation.

2] Thick Tape Options

In the event that we are not ready to use thin tape because of limitations in the expected lifetime, Peter has asked for a study of the thick tape options. Our present knowledge is that the "old" thick tape would support 45 Kb/inch, the same number of passes as the thin tape, and cost about \$180/reel. (If any additional tapes are required to augment - ~5000 should become available when processing backlog is gone, and all investigators have released their tapes). "New" high-definition thick tape (D1 magnetic) should support the same bit and track densities as the thin tape - but initial indications are that it will cost about \$1000/reel.

Ken Stetten agreed to seek further information from the tape manufacturers on the cost and availability.