

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
HAYSTACK OBSERVATORY
WESTFORD, MASSACHUSETTS 01886

13 December 1985

Area Code 617
692-4765

To: VLBA Data Acquisition/Recorder Group
From: Alan E.E. Rogers
Subject: Minutes of the Acquisition/Recorder Group Telecon
Held 11 December 1985 at 1600 EST

Attendees: Craig Walker - NRAO
Larry D'Addario - NRAO
Jon Romney - NRAO
John Webber - Haystack
Hans Hinteregger - Haystack
Jim Levine - Haystack
Bill Petrachenko - Haystack
Alan Rogers - Haystack

Formatter Track Permutation Switch

Since the completely flexible track permutation switch in the present formatter design requires a substantial amount of circuitry and space in the VME crate, serious consideration should be given to the implementation of a simpler "cyclic" or "barrel" track switch. Craig Walker emphasized the importance of retaining some method of making the loss of one track result in only a loss of integration time without the loss of an entire baseband channel. Everyone agreed that completely flexible track permutation is unnecessary. Hans and John explained the use of the "spare" or "system" tracks as a means of providing some ability to overcome bad tracks.

Formatter Expansion Paths

Haystack's current proposal is to provide two Formatters per station - each capable of a maximum throughput of 256 Mb/s (32 8 Mb/s tracks) - and each capable of digitizing 16 baseband channels. Larry D'Addario suggests we consider a single Formatter with 512 Mb/s throughput (64 8 Mb/s track) and 16 baseband channel inputs. Jim Levine provided preliminary cost estimates and asked for a rapid decision. Larry promised to meet with other NRAO people for a decision on 13 December 1985.