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TO: VLBA Processor Group
FROM: Alan E. E. Rogers
SUBJECT: Number of Channels for VLBA: Comparison of 2 Schemes

I have compared two possible video channel schemes for the VLBA.

The schemes are as follows:

- A) 4 12.5 MHz (25Mbits/sec) channels as per VLBA program description (May 1982)
- B) 14 4 MHz (8 Mbits/sec) channels

Table 1 summarizes the characteristics and requirements of the schemes. Scheme A has the advantage of requiring only 4 video converters, the simplicity of fewer channels and has sample rate compatible with the VLA. Scheme B is well suited for bandwidth synthesis needed for precision astrometry and geodesy. It has sample rates compatible with the MK III and has advantages for low frequency pulsar observations.

AEER/kw

