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! VLBA CORRELATOR MEMORANDUM NO. 006 !
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To: VLBA Correlator Group

Date: 28 Nov. 1983

From: Martin S. Ewing

Subject: Minutes of Local Meeting of Nov. 23, 1983

The first "local" meeting of the VLBA Correlator Working Group was held at 14:00 on 11/23/83. Attending were Rogstad, Brock, Renzetti, Readhead, Seling, Pearson, and Ewing.

1. Report of events at the recent Charlottesville VLBA meeting.

Possibly the most important topic was the funding plan for the VLBA project. The working plan of 3 years of construction at \$20M/year may not materialize, and we were asked to consider the impact of stretching to 4 years at \$15M. Effects on the correlator effort seem to be mixed: a longer project means more time to perfect our designs, but increases overall costs. (NSF is said to consider the increased cost as simply equivalent to taking the interest the government collects on money not spent. Therefore there is little net effect on the national debt.)

There was (still) considerable discussion of tape recording systems. The JPL/Barger approach is still promising and should be pursued. We should assist Haystack as appropriate to be sure that the longitudinal system receives full consideration for the VLBA application.

Cassettes remain NRAO's choice for a baseline system, however. The Charlottesville consensus was that the present NRAO efforts on the cassette system were insufficient to achieve full evaluation of cassettes against the longitudinal system. Haystack felt it could not fully pursue both cassettes and longitudinal approach without extra funding, but (we believe) they agreed to increase their efforts.

There was some discussion of correlator issues at Charlottesville, but not very much. One topic was how to handle the case of narrowband observations with possible speedup of correlation as compared with recording. (The longitudinal system permits this more readily than does the cassette.)

2. Plans for future meetings.

Ewing pointed out the need to evaluate the current "proposal" for the VLBA correlator contained in Chapter VII of Vol. III of the VLBA red book series. In the future we should have a critical review of Block II (from the VLBA perspective) and possibly of the Haystack Mark III system.

Next Meeting: Weds., Dec. 7, 14:00 in 112 E. Bridge

Subject: Presentation of the "Chapter VII" Correlator (MSE)