VLBA CC Memo No. 33

NATIONAL RADIO ASTRONOMY OBSERVATORY

Charlottesville, Virginia

1984 Sep 24

His apologies

- To: Coordinating Committee
- From: P. Sebring
- Subj: Notes from Coordinating Meeting, 1984 Sep 21.

Participants

NRAO-CV	 H. Hvatum, moderator C. Walker R. Burns M. Balister J. Romney J. Benson R. Thompson W. Porter B. Cotton P. Sebring
NRAO-GB	K. Kellermann B. Peery
NRAO-VLA	B. Clark P. Napier W. Horne
Caltech	M. Ewing A. Readhead
Haystack	<pre>(A. Rogers unable to participate. His a - and he will update us next meeting.)</pre>

1. Action List, 84 Sep 20 update

1.1. Select Communication Protocol. B. Clark predicts Sep 28 as the date he will report completion of this.

1.2. RFI tests. At the 84 Sep 19 Sites meeting, it was agreed that RFI tests may not be made in Iowa this fall. It is more urgent to get data on possible sites on the mountain and at available missile sites down below near Tucson. A decision is pending as to a site on the Mountain near the 12-meter vs. a valley site, and relative RFI is one input, along with relative wind and atmospheric turbulence and opacity.

New dates will be provided for completing RFI work at Pie Town and Los Alamos. (Napier). Only a few higher frequency checks remain to be done at Pie Town, where there seems to be little problem. Several weeks may yet be required at Los Alamos to assess the effect of RFI from Sandia Peak and Albuquerque. (Napier).

1.3. Monitoring & Control Documentation. Clark states this work should be complete by Oct 12.

1.4. Select Antenna Computer. Clark expects to report this complete by Sep 28.

1.5. First Cooldown of 1.5 GHz F.E. Thompson reports it took nearly 32 hours to bring the orthomode junction down to 50K! Balister felt that the front end itself probably came to 15K or so. Tests continue.

1.6. Specify Fringe Processing Tasks. Benson reports that a memo on this has been issued.

1.7. Final Maser Clock Spec. Thompson reports that we have what he considers a final spec, although comments are still welcome. To a question concerning comments from outside NRAO, Kellermann responded that J. Moran (SAO) reviewed the spec. It was agreed that Haystack should also be consulted, and Kellermann will see to this.

2. Budget/Program Plan for 1985

A revised VLBA Budget and Cost Estimate is available on the VAX. Prior to the next Coordinating Meeting (Oct 5), Bill Porter's office will discuss with each group chairman his bottom line allocation, (less the amounts required for planned personnel and travel costs) relative to the adequacy and planned disposition of available funds.

3. Items for Scientific Meeting, 84 Sep 28

The following items emerged from this discussion:

a) The matter of how the VLBA will work with other antennas, including the Canadian array, should be discussed.

b) As a corollary, so should the matter of how the correlator will handle more than 10 stations. Ewing reports he has a spec. Walker will propose a list of people to review same. c) Readhead suggests that this meeting should discuss an interim operation plan for the AOC.

d) Napier feels the plan for the radio links needs further discussion. Should the Pie Town link be funded in place of one of the hydrogen masers planned for 1985-86? In any event, he feels the plans should be gelled soon.

e) The question of mountain vs. valley location for the Tucson site might also be discussed with profit at this meeting.

4. <u>Status of Contracts (Porter)</u>

4.1. Antenna Contract. No change since last week, except that a package of material just arrived from RSi in response to questions raised at the technical discussion of Sep 6-7. This material must be reviewed prior to the RSi negotiating session scheduled for Oct 3-4. Negotiations with TIW are scheduled for Oct 10-11.

4.2. A.& E. Contract. Porter is preparing request to the selected contractor for a firm quotation.

4.3. Caltech Contract (Correlator). We have had a verbal reply from the NSF that the contract has been approved. Signing expected shortly.

4.4. Haystack (NEROC) Contract (Data Recording). A Change Order is being prepared reflecting the decision to utilize the longitudinal recording method for the VLBA and to discontinue work on the cassette method.

5. Meeting at Caltech next week.

Walker and D'Addario plan to attend the session on the VLBA. Napier suggested someone should attend the discussions on Water Vapor Radiometers (WVR) since our own work is getting underway.

6. BIG Review Meeting in November.

Concerns were expressed about the cost in travel and time. There were suggestions that the meeting be put off until next spring, and that it be held in two or more places using teleconferencing. There were also concerns, however, that designs are hardening and may be coming not to reflect the best scientific judgment.

In the end, it was decided to schedule a meeting to begin immediately after the Users' Committee meeting ends at midday on Nov 15, and to run through Nov 16, with spillover into Nov 17 (a Saturday), if need be. The scientific group should definitely be present.

7. Meeting Notes.

Hein plans to put these Coordinating Meeting notes, along with the topics and action list for the next meeting, into the VAX each Thursday.