

NATIONAL RADIO ASTRONOMY OBSERVATORY

Charlottesville, Virginia

1984 Oct 08

To: Coordinating Committee

From: P. Sebring

Subject: Notes from Coordinating Meeting, 1984 Oct 05

Addressees are invited to let Paul know about errors in these notes.

Participants

NRAO-CV            H. Hvatum, moderator  
                    L. D'Addario  
                    R. Burns  
                    J. Romney  
                    J. Benson  
                    W. Porter  
                    B. Cotton  
                    P. Sebring

NRAO-GB            K. Kellermann  
                    M. Balister

NRAO-VLA          C. Walker  
                    P. Napier

NRAO-SOC          W. Horne  
                    B. Clark

Caltech            M. Ewing (out sick)  
                    A. Readhead

Haystack          A. Rogers

1. Action List, 84 Sep 26 update

1.1. Correlator Contract (Caltech). Approved by NSF and signed. Item complete.

1.2. Budget Allocation. No time spent on this.

1.3. Select Monitoring and Control Computer. Clark reports a meeting two days ago, and that VAX has been selected. Item complete. Clark reports some discussion of microprocessors, etc., in the M/C system is continuing.

1.4. First Cooldown, 1.5 GHz. Thompson absent. Sebring amended last meeting's quote of Balister to say that the front end itself was probably cool (~15K) and usable long before the 32 hours it took to cool the OMT to 50K. No further news.

1.5. Select Communication Protocol. Clark reports this item complete.

1.6. Select Antenna Computer. Clark expects this to be complete by October 9, 1984.

1.7. Antenna Profile. Napier points out that this item is not needed until antenna design contract is let.

1.8. Specify IF Signal Processing. D'Addario reports this item proceeding. Will push.

1.9. Specify M/C/Corr. Language and Op. Sys. Clark quotes one-month delay in completing this item, and suggests we "still have time." (Hvatum points up need for a new project schedule ASAP after antenna contract is let, in order to assess more realistically the effect of delays).

1.10. RFI Tests, Los Alamos. Napier reports these are complete. Location satisfactory provided filters are provided for the longer wavelength front ends to cope with strong TV and FM interference. We should proceed to request land for a site, being careful not to go where there is a direct line-of-sight to Sandia Peak. Measurements show interference > 20dB higher in such locations.

1.11. RFI Tests, Pie Town. Napier expects to see these completed next week.

1.12. Final M/C Documentation. Clark projects completion of this item by November 16. Napier points out that antenna servo designer will need design info on the M/C system by ~2 months after the antenna contract is let. (The same applies to our Antenna Test Controller.) D'Addario thinks there may be some misunderstanding about what we vs. the antenna subcontractor are to provide. He will discuss with Horne.

## 2. Plans for Review Meetings

Apparently, the BIG Review Meeting following the Users Committee meeting (Item 6, VLBA CC Memo No. 33) has been scrapped due to conflicts.

Napier suggests ~2 hour technical review meetings via teleconferencing with the addition of identical viewgraphs at each location. Has been tried and found effective. Would hold at ~1 month intervals and review one section of the VLBA at a time, so that in ~6 months the entire project would be covered.

Many comments on the above: "No substitute for face-to-face, but still worth trying." "We need to see the whole Project at one time". "An alternate might be computer conferencing. People have time to consider their questions and answers, and there's a hard-copy record at all locations." "There must be (1) a clear goal, (2) good visual material and (3) a strong chairman for any such meeting."

Hein suggested a date of November 9 for a trial of Peter's suggestion. A review of Electronics was first proposed, but Walker felt a playback system and correlator review is needed first. Haystack and Caltech should start thinking about this. Rogers feels controversial items should be settled separately before any such review.

This subject will be discussed again next week.

## 3. Variable Phase Sampling at Antennas

Rogers says Haystack is looking into this but will not be ready with a conclusion/recommendation for a month. D'Addario says this question is influenced by the need to use stations of the present Network (which won't have this feature) with the VLBA in the future.

## 4. Antenna Negotiations

Hvatum reported that most questions were resolved in this week's two-day meeting with Radiation Systems, Inc., in Sterling, VA. Their "best and final" proposal is due by Oct. 18.

The negotiating team visits TIW Systems, Sunnyvale, CA this coming week.