## **National Radio Astronomy Observatory**

Very Large Array May 3, 1979

To:

M. S. Roberts, D. E. Hogg, C. M. Wade and B. G. Clark

From:

R. M. Hjellming

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Subject:

A Suggestion for Handling the VLA "Source Monitoring" Day

There are two problems for which I would like to suggest a solution for your consideration. The first problem is the continual difficulties with the periodic "source monitoring" day scheduled every couple of months. It has been hard to get individuals to put in the time necessary to schedule, calibrate and reduce the observations. In addition, with the way it has been done so far the quality level is very variable depending upon the care put into editing and calibration, particularly at high frequencies. Basically, we have too few people who are too pressed for time. Even if they had the time, there is some question about the quality of the results when the person doing the work has no vested interest in any of the results. The second problem is purely my problem: I have been using, and would like to use even more, the source monitoring possibilities for scientific projects.

My suggestion is that the monitor day observing should be handled by a single person, for a year or so at a time, under circumstances where it is greatly in the self-interest of this person to do the job right. For example, if 40% (not just a random figure) of a 24-hour VLA observing slot could be used by the above mentioned person for previously approved sources of personal interest, it would be worth it to schedule, calibrate and reduce both the 40% of personal interest and the remaining 60%. As a reward for the 40% this person would fulfill the requirements of source monitoring observing requests, up to a limit of 60% of the observing period scheduled for this purpose. Other individuals with sources to be monitored would have only one person to deal with in discussing scheduling, calibration and results. The NRAO staff member, the NRAO and those requesting monitoring of sources would benefit from an arrangement of this type.

If the 24-hour monitor day were scheduled about once every two months, I would be willing to handle the monitor day on the basis suggested in the previous paragraph. The currently scheduled IIIZw2 monitoring would be continued. The proposed monitoring of visibility function changes in SS433 could be handled. In addition, given this opportunity, I would propose monitoring more X-ray quasars/Seyferts with time variability like IIIZw2. Finally, with the usual pre-observing check for approval from Barry Clark or Dave Hogg, I could observe and monitor targets of opportunity like novae, new X-ray sources and new radio stars whose time variability and spectra are frequently not established after initial detection.

Page Two May 3, 1979

The only problem, that I think of, that NRAO might have with this is that some of the sources I would observe for myself would be OK'ed by Barry Clark or Dave Hogg, but not by the normal referees. I would be happy to regularly report to you, and perhaps the referees, about all sources observed with what results. In this way "the system" could evaluate, with a few month's delay, whether the results are worth it. You could stop it or change to someone else if it seemed necessary.

I can imagine a number of scenarios. Cases of clear and unresolvable conflict of interest, in which case I could not observe certain sources. Cases with an overlap of interest where it might be to the advantage of other proposers to have me do the monitoring, and then we collaborate, exchange information, or do whatever seems necessary. Cases where only I propose to monitor or try to detect a new nova, X-ray source, etc. Cases where others will ask that targets of opportunity be observed on monitor days, with approval of Barry or Dave, and myself in this case because I would have to resolve conflicting scheduling requirements.

I hope you will consider part or all of these suggestions seriously.

RMH/drg