

NAAPO (North American AstroPhysical Observatory)

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RUGARE AGREES TO SCIENTIFIC POST

Jill Rugare has agreed to help coordinate the scientific mission of NAAPO. Her training in Radio Astronomy at the University of Michigan will be a big asset in this post.

The immediate goals for this job involve helping to write the research proposals for the Radio Observatory and begin to plan the observational program for the time the 11/23 is installed and ready to operate. We will be looking forward to receiving regular reports from this "office". Welcome aboard, Jill.

ABBOTT TO COORDINATE CART PROJECT

Carol Abbott has agreed to take on the cart controller project. She will help in the drawing up of specifications and the direction of the field work, design and testing of the components to do the job. She will be the project manager and bring together the various groups that will be working on the project. It was decided that this project needed to be farmed out soon as the local technicians are up to their ears in 11/23 tasks.

A further report on this project, which will be undertaken first at Manchester College, will be made at the next working session.

PROJECTS TO BE DEVELOPED

NAAPO is always looking for ways to utilize its resources, particularly its consortium members. In this direction,, some ideas which have begun to formulate include:

- 1. Fixing the "long languishing" 1420 MHz calibration oscillator. This can give us an immediate test of system sensitivity, something which we do not have now. The project as envisioned entails two stages:
 - a. Make it work quickly right in the horns. Provide suitable power supply, frequency multipliers, filters to pick out the right harmonics, adjustable attenuator, etc. Put the oscillator and all equipment in the focus room and run a small coax outside to a probe in front of a horn.
 - b. Move the whole works to the parabola. Provide a temperature-constant box, etc.
- 2. A cart controller drive to be coordinated by Carol Abbott. More on this elsewhere in this newsletter.
- 3. A number of data analysis/reduction projects exist which can be managed at remote sites. We will need a coordinator to work with this also.

As additional projects are suggested they will be entered into the project file in the <u>newsletter</u> so everyone interested can get into the action. Project proposals from the

consortium members will be welcomed. Consultation with the proposer will be undertaken as soon as possible.

WORKING SESSION NOV. 15, 1986 at BIG EAR

In Attendance: Barnhart, Bolinger, Davis, Dixon, Mitchell, Mook

- 1. Gene Mikesell will be pulled from his work at Big Ear effective 5 Jan, 1987. We need to find a way to keep him or start looking for a crew to train to replace him.
- 2. The OSU Radio Club may not come out and build our fence after all. It was decided that erecting the tall tower on the ground plane was a bad idea. The supplies have been purchased, however, and it may be built by Otterbein volunteers.
- 3. The Moonbounce project has been scrapped. It will not go at Big Ear this time.
- 4. <u>Jim Bolinger</u> brought a photo of the assembled 1I/23 taken by <u>Ron Huck</u>. Still waiting on parts. Orders are to go out this week to <u>John Kraus</u>.
- 5. DeVry-- <u>Jim Bolinger</u> expressed concern over the student assigned to the drafting project calling him about dropping off the job. Barnhart will clarify this with <u>Jill</u> Rugare soon.
- 6. Phil Barnhart to pick up equipment donations from Denison University on Monday.
- 7. Bill Mook is scheduled to pick up suitcase SETI from Horowitz around 22 Nov.
- 8. Discussed:
 - -Dec. agenda
 - -Outlining various projects
 - -assembly of various interface systems
 - -cart controller
 - -cart drive
 - -cart condition indicator

-listing of tasks needed to complete before March

-Should we confront OSU directly over their "injustices?" The answer: Not now!

Next meeting: 6 Dec 1986, 10 am, at <u>Barnhart's</u> (see map)

EQUIPMENT FROM DENISON

Through the efforts of <u>Dr. Mike Mickelson</u> of the Department of Physics at Denison, NAAPO now has two strip chart recorders and some microcomputer hardware to plug into our projects. The first shipment was received earlier this week. The remainder is due shortly.

DIRECTIONS TO BARNHART'S

Working Session - 10:00 AM

4655 Indian Court; (614) 882 - 6711

We are north of Westerville which is on the northeast corner of the Metropolitan Columbus Area. Ready access to Westerville from I-270. The route of choice is Cleveland Ave. north to Main Street.

From the WEST: Take Powell Road EAST to its termination at Worthington Road; turn LEFT (NORTH) -- cross Alum Creek -- to four-way stop intersection with Africa Road; turn RIGHT (EAST); proceed one-half mile to Indian Court (second road to the RIGHT). Indian Court is set off by two brick columns.

From the SOUTH: Exit I-270 at CLEVELAND AVE. This interchange is one mile EAST of I-71 which has direction signs to [CLEVELAND -- NORTH]. It is also about one mile WEST of the State Route 3 interchange into beautiful downtown Westerville. Proceed NORTH on Cleveland Ave. past four traffic lights to the fifth which is between McDonalds and a SOHIO station. Turn RIGHT (EAST) on Main St. past one traffic light, cross Alum Creek and turn LEFT (NORTH) at the first street you encounter going up the hill from the creek. This is North West St. Do not exit this street until you are well out of town. About a third of a mile from Main St. West Street becomes Africa Road. As you leave Westerville you will find a road from the RIGHT called Moss Road. Check your odometer, Indian Court is exactly

one mile NORTH of Moss Road on the LEFT between the same two brick columns mentioned before.

Our house is the last house on the RIGHT side of the court. Park in the driveway or off the roadway on the court. Enter the house past the A-frame bird house.

DAVIS TO LEAVE -news OFFICE

As often happens, when you just get a hard worker broken in (down?) someone else comes along and recognizes what you have put into her. <u>Michele Davis</u> has decided to take off into an internship with a publishing company starting Winter Term. We will miss her in the routine operation of the office, but expect to see great things coming from the publishing field as a result.

DIXON AND BARNHART STAR ON CALL-IN

On November 14 Bob ("Heeeeeere's Robert") Dixon and Phil (Cronkite) Barnhart appeared for two hours on a one hour WOSU Open Line call-in show with hostess Judy Cramer. It was a sort of Paunch and Judy Shaw. The topic was "Extraterrestrial Life" and went very well in spite of the fact that Judy kept asking her audience, "Have you seen any lately?"

The lines were always busy and the questions generally were quite good, reflecting well upon the high quality of the audience that listens to that station.

A tape of the show, at least the first hour, is available from the NAAPO Headquarters. That of course assumes anyone in their right mind might want to hear it. So far the New York Times Entertainment editor has not seen fit to review the show. The Nielsen ratings are not conclusive. We were not on close enough to the Cosby Show.

CART CONTROLLER PROJECT BEGUN

During discussions with the consortium representatives at Manchester College it became apparent that they would have the talent and desire to undertake the design and construction of an independent Horn Cart Control System to monitor the location and speed of the horns and provide control signals to change these quantities. Specifications are now being drawn up for the devices necessary to accomplish this task and it is hoped the task can be officially charged and begun in early December.

COORDINATOR'S CORNER

It hits all at once. The end of the term is the ideal time for all the important committees and various people to pool their respective crises into an unmanageable quagmire of decisions and interminable memos. And then of course, final exams. I will be delighted when the new term starts and no one has problems.

NAAPOnews is late. Michele was on time. The material was there. The Coordinator was not. You must pardon the few days delay, I promise it will happen again.

The time has come to seek out financial support. We are faced with the age old problem of support for the "outsider" (or non-affiliated) researcher. How can the outsider get support? Three answers come to mind.

- 1. Often there is no support.
- 2. By becoming affiliated.
- 3. By finding a benefactor.

I suggest NAAPO now has the affiliation needed. We are affiliated with a collection of academic institutions -- all reputable and productive. Soon we will be calling upon the liaison persons to gather for our research proposals the vitae of all faculty members expected to take some part in the program of the Observatory. This will be the foundation of the credibility we need to establish to a funding agency. Be forewarned. You will hear from us soon. Touch up and revise those resumes.

Just as the probability of making scientific discovery is zero if no one is searching,

the probability of getting support is zero if no one applies. Jill and I are starting to write a variety of research proposals to be submitted as soon as they are written. Members of the consortium will be informed of the contents of these proposals as they are turned out. We also welcome any suggestions as to possible sources of funding for his organization. We will be willing to try them all.

The harassment from the College of Engineering at OSU continues. The major advantage is that they seem to be running out of things they can do directly. We have to become productive soon if we expect to survive the next decade.

Till the 6th of December PEB

EQUIPMENT NEEDS

The following is a list of various and sundry equipment needs:

For the <u>PDP 11/44:</u>

- RSX11M (or RSX11M+) operating system
- Fortran 77 compiler
- Fortran Debug software (not critical, but very helpful)
- 6 RK07 disk packs
- 11/44 floating point processor
- Manuals of all kinds relating to:
 - -11/44
 - -RK07 disk drive
 - -11/44 memory
- 1600 BPI tape drive and Unibus controller

Also desirable, but not so critical:

- Additional memory
- Expansion backplane and box

For the 11/23:

- TSV05 tapedrive and controller
- 2 RL02 disk drives
- Fortran Debug software
- Latest version of RSZ11M software
- Latest version of Fortran software
- DLV11E
- DRV11J
- Manuals for all the above

CHECK YOUR MAILING LABEL

If it contains a row of (*)s across the top, you have "paid" your dues. You may have had your dues paid for you. At any rate, if no string of * * * * * s adorns your mailing label you might consider writing to me explaining either 1) why you deserve a string of * * * * * * s, or 2) how you intend to garner your own string, or 3) that you no longer care about Big Ear and NAAPO. Better yet, send us 11.7 million shares of Goodyear stock and make our day.

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Designed by Jerry Ehman

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