



NAAPO (North American AstroPhysical Observatory)

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STORM PLACES COMPUTER IN PERIL

A massive electrical storm the night of 2 - 3 August left much of central Ohio without power. Many systems dependent upon electricity were either totally down or drastically affected by surges during or after the storm. Air conditioning systems seem especially hard hit.

Temperatures in the Dreese Labs Radio Observatory complex reached into the 100 - 110 degree range following the storm. Automatic shut-down has not been implemented. As a result of either the electrical anomalies during the storm or the elevated temperature after the failure of the air conditioning one power supply seems to have malfunctioned.

This indicates the importance of building an environmental monitoring system which can be used to protect the 11/23 and all other systems during storms or

electrical anomalies. This will be added to the list of tasks to be undertaken in the next few months.

PROGRAM GLITCH NOW CLEARED UP

Marc Abel has now cleared up the problem of system latch-up encountered over the winter when attempts to address more than one indirect task at once left the systems hopelessly choked. He has succeeded in starting up to 42 indirect tasks without a system crash! Sequential abortion of the tasks also failed to bring the system down. Another milestone passed.

BRACEWELL COMMENTS ON WHERE ASTRONOMY IS GOING

In an after dinner speech to the 20th annual general meeting of the Astronomical Society meeting in Hobart, Australia, Ronald N. Bracewell got in a plug for his view of why astronomy is practiced at all. He also underwrites the Search for Extraterrestrial Life as the core of astronomical research. His comments are in part as follows: (Proc. ASA, 6, 522, 1986)

"I would like to propose that human curiosity about our habitat is the fundamental reason for astronomical research. Very possibly this is not a controversial proposition, but I would like to go further and claim the ultimate search for extraterrestrial life is the highest goal. If other life were found our view of our place in nature would be deeply altered. If on the other hand we were unique the philosophical impact would be immense.

My proposition can be used as a criterion to choose lines of research that, in one's own judgment, may be more likely to lead to results bearing on the question of extraterrestrial life."

[As Walt Mitchell provided NAAPOnews with a copy of this talk, I will be happy to share it with anyone interested in reading the whole text. Just contact me at NAAPO Headquarters.

PEB]

COORDINATOR'S CORNER

Talk about feelings of inadequacy. I found myself in the position of making decisions about what to move and what not to move at the work party last Saturday. Bob Dixon was basking along a lake in Wisconsin and Jim Bolinger, the only other electronics wizard at the Radio Observatory, was basking at places unknown.

How does one decide what might be needed in the focus room after the 11/23 moves in? First rule of thumb; if it weighs too much for two people to move, it goes. Second rule of thumb; if it is a card or something that reads a card, move it. Third rule; (of toe, since I'm out of thumbs) — if it requires the hydraulic lift gate on the Ford truck, leave it because the word was Bob took the keys with him to Wisconsin.

At any rate the focus room looks half ready to go. Another session should place us in the position to start moving the PDP 11/23 up to the observatory. In spite of the terribly long list (compiled by Bob Dixon) of items to be done before the move can take place, we should be looking for fresh signals from real radio sources before the autumnal equinox. HOW'S THAT FOR OPTIMISM?

It is my understanding that Bob has requested the IBM 1130 console for a coffee table in his living row. We will drop it off the same afternoon we move it out of the focus room. Of course, the mice will be delivered along with it. Marc Abel found one mummified mouse in the chaff drawer of the card reader. We still have the problem of mouse control in the focus room. The poison we have been using just seems to make them drowsy.

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STEPHENS CHECKS IN FROM HRRO

As the last issue of NAAPOnews went to the mail room, a letter from Bob Stephens at Hay River arrived in our office. He reports a couple of items of interest to the friends of NAAPO.

HRRO has a summer intern to help with the extensive jobs at the far northern site. Peter White, a physics student at St. Mary's University under Bill Lonc, is spending some weeks at Hay River. Peter has an interest in SETI and planetary science.

Bob also reports that his tour of Big Ear, Algonquin RO, NRAO and the NRC's Herzberg Institute of Astrophysics in Ottawa has allowed him to upgrade the computing capability at HRRO. He will be installing a PDP-11/45 at the observatory on loan from NRC. He is now looking for additional hands to help with the programming of this computer.

Stay tuned.

ASTERISKS MISSING?

WE ARE READY TO CLEAR THE BOOKS. THIS IS THE LAST ISSUE OF NAAPOnews TO BE SENT TO A NUMBER OF OUR REGULAR READERS. KEEP OUR ADDRESS HANDY. WE WILL BE HERE WHEN YOU COME BACK.

WORKING SESSION

1 AUGUST 1987

PRESENT: Latta, Boyd, Mitchell, Huck, Abel, Barnhart, and Dave Backus, a NEW volunteer!

A short business meeting was conducted in order to allow time to continue the on-going work party to clean up in preparation for the move into the focus room.

PROGRESS REPORTS:

The 10 synthesizer interface cards are completed. The 5 spares are yet to be finished. The opto-isolators used in the circuits are on the verge of not working. They fail to drive the synthesizer at some frequencies. We need at least 110 of them (Type 4N33 or equivalent). If donations are not forthcoming in the very near future,

we will have to buy them.

There is continuing need for display and storage programs to be written.

When the problem of permanent labelling of the 11/23 cabling was brought up, Dave Backus, here for his first working session, commented that he is in the business of producing computer cabling and thinks he can help us out with some cable labels. This is great news and we will accept all support he can give us.

The petty cash at Dreese has been depleted. Barnhart requested the complete file of receipts be sent to him so he can write a voucher to replenish it.

A secretary to replace Andrea Fee has not yet been found. We would be glad for a volunteer, but will probably have to settle for a work-study student.

Barnhart is commencing the proposal assembly. A number of options exist for funding. The question of the status of the organization to receive the grants should they be forthcoming now has to be worked out. Barnhart is exploring this matter at the present time.

NEW BUSINESS:

Considerable concern was expressed over the moving of the flat reflector. Although there are several people capable of moving the reflector, the condition of the brakes and the mechanical system is still in question. Inspection by a knowledgeable engineer or past user seems to be desirable.

Barnhart reports that the Gould Recorder is back in the works and that if it is forthcoming in the next several weeks we will have a problem of finding a cool storage space for a large number of cases of thermal chart paper. It would be a shame to have to turn over the conference room at the Radio Observatory for paper storage.

The meeting was adjourned at 11:05 and work was begun in the focus room.

NEXT WORKING SESSION: 15 August 1987 10:00 am

WORK PARTY the same day!!!!

NOTABLE QUOTES

- - Continued

The following quotation is taken from the Congressional Record in 1875! No one had submitted an estimate by press time, so the fabulous award will be held in escrow until someone starts to read NAAPOnews.

"Never in history has society been confronted with a power so full of potential danger and at the same time so full of promise for the future of man and for the peace of the world. The dangers are obvious. Stores of gasoline in the hands of people interested primarily in profit would constitute a fire and explosive hazard of the first rank the discovery with which we are dealing involves forces of nature too dangerous to fit into our usual concepts"

The underlined portions were left out of the quotation published last issue.

HORN CART AGAIN MOBILE

The winch and drive cable have been reattached to the horn cart. Mobility is returned, but there is still need to replace four small wheels on the scissors arm and outrigger before the system can become operational. We seek donation of approximately 8 inch pneumatic or semi-pneumatic tired wheels. Many wheels are too light for the load encountered.

FLOATING POINT PROCESSOR STILL NEEDED

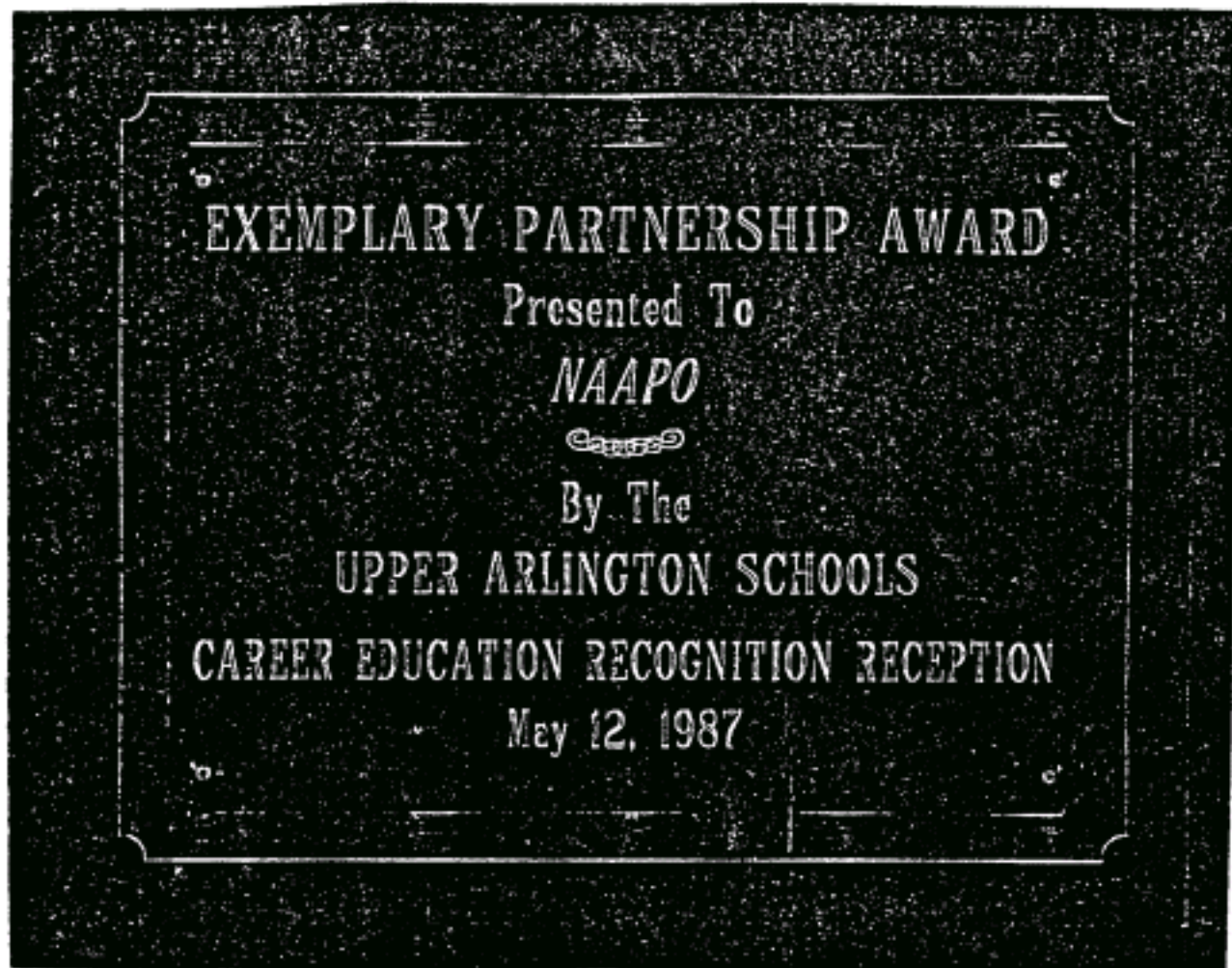
The 11/44 still needs a floating point processor. ANYONE HAVING ACCESS TO A FP11F CARD THAT CAN COME OUR WAY PLEASE NOTE!!!

FURTHER NEEDS:

Parallel I/O interface, preferably non-DMA
Manuals for everything
Two new capstan rollers for TU-10 tape drives
Massbus interface
Anything else we can get

Jim Bolinger

EXEMPLARY PARTNERSHIP AWARD



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Designed by Jerry Ehman

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