

40072

summary policies

DATE: April 9, 1974

To : File

FROM : Joshua Lederberg

SUBJECT: Management Policies of the NCAR Computer Facility, another disciplinary resource.

I had a good talk today with Joe Oligar who is the Director of the Computer Facility at NCAR. This is an inter-university consortium which is funded by the National Science Foundation. It has a scientific staff of about 125 people and includes a rather comprehensive computer facility, some big CDC machines, which are oriented to very large batch programs only.

They have a Board of Directors which represents the university consortium as far as the computer allocation is concerned. Their main responsibility is simply to make the first allocation as between time allowed for insiders, outsiders and joint projects.

The insider usage is managed through internal procedures.

They have an advisory panel of computer science people and some atmospheric scientists from the participating universities separate from the overall board. This panel sets policies for the outside segment and it runs pretty much as you might expect. I am hoping to receive from Oligar some documents which will give more formal details about their procedures including their algorithm for counting computer resource units.

They allow local approval without going through the advisory board for usages up to 20 or 50 hours of 6,600 machine time. All larger usages, plus all usages of any size from people within 50 miles of NCAR must be approved by the advisory panel, although they are able to make considerable delegation of this responsibility. They expected a good deal of trouble and had just a little with respect to conflicts of purpose from people at Boulder and Denver. The main problem evidently was competition with their local university computer centers, especially at Fort Collins. So, all of the local people are given the additional barrier of having to go through the advisory panel. As far as other outside users are concerned, the threshold for informal approval is about 1% of the annual resource. The advisory panel is named by one of the deputies to the director of NCAR. Presumably this entire procedure was authenticated by the overall board of directors.

The advisory panel meets 2 or 3 times a year and they generally require about 6 months turnaround time! However, it should be kept in mind that they are dealing with huge projects involving very significant parts of a very large computer resource. For smaller number of hours provisional approval can be given locally so that people can be doing some preliminary work and debugging before they have had formal advisory board approval for their big projects. They can also do occasional mail votes which take two or three months to turn around. They look very closely at the scientific value of the projects and also at the computer technical efficiency of the algorithms that are proposed. This obviously requires a great deal of work on the part of their review committee.

They will send out proposals to other confidential consultants for further advice. The content but not the names associated with these criticisms are returned to the applicants.

The NCAR group has reserved the right to refuse projects regardless of agency funding and presumably vice versa.

They provide no programming support at the present time for outside users although they have a substantial staff to support the inside work, and of course a program library is a by-product of this.

As part of the application forms they generally require an endorsement from the computer center of the applicant's institution, and they also notify those centers of approved programs. All this presumably is to take care of the unfair competition problem.

Their resource is completely subsidized and is allocated on a no-cost basis. However, they are starting to consider the need to charge for expendable supplies.

They think it is very important that people outside have a clear idea as to the length of leetime that will be required to process their applications and they have had many examples of unreasonable and un-fulfillable expectations.

They also run a summer program involving perhaps 10 graduate students to introduce them to the applications of computing in atmospheric physics.

Oligar was interested in how we were proposing to run our program and I promised to get him some documentation eventually, namely when we have our own.

At NCAR they have not had any great pressure to institute even fairly elementary time-sharing service such we enjoy at Stanford and of course the pressures on the systems would be greatly enlarged if they did anything other than big batch processing. They are expecting to introduce remote job entry in the near future and Oligar will be very interested to see how they can manage from there on.

cc: Tom Rindfleisch
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