
Research Information Service Imperiled

The Smithsonian Science Information Exchange (SSIE), for 30 years the only source of information on all federally funded research in progress, now faces the possibility of strangulation by budget reduction.

The service, originally started by several health-related agencies as the Medical Sciences Information Exchange, now has a staff of 77 who prepare publications about ongoing government research in all areas and maintain a computerized index of projects. Although the service was made into a private corporation in 1971, it has received funding from various federal sources throughout its existence. For the past 2 years it has been subsidized by the Commerce Department and before that by the Smithsonian Institution.

In 1977 a General Accounting Office report recommended that the exchange be "federalized" to lay to rest questions about its ambiguous public/private status. There appeared to be general agreement that SSIE should become part of the Department of Commerce's National Technical Information Service (NTIS), but delays in Congress and protests by SSIE employees caused final action to be postponed.

Then along came the Reagan Administration, which in its fiscal 1982 budget proposed that SSIE retain its private status. It also proposed a \$300,000 cut in its appropriations, to \$1.7 million.

The SSIE is now in a very awkward and precarious position, according to its president, David Hersey. Smithsonian officials still dominate the corporation's board, even though the SSIE appropriation now comes through the Commerce Department. The Smithsonian Institution no longer wants any responsibility for the SSIE, however, and it may end its role in the corporation. The data base would then presumably be absorbed by NTIS.

For the service to continue at its present level, a congressional commitment would have to be made to spend what is necessary to retain the staff and continue the full range of services after SSIE's absorption by

NTIS. But even then, serious problems loom because the Office of Management and Budget wants the government to stop subsidizing its information services and get users to pay the full costs of data collection and preparation. SSIE is supposed to achieve full cost recovery by 1984. Only about one third of its expenses are now paid by users. So far, says Hersey, "no one has come up with a rational plan to get total cost recovery." Besides, jacking up user fees may be robbing Peter to pay Paul, since 70 percent of SSIE users are other government agencies.

At this point it is most likely that absorption into NTIS will turn the service into a shadow of its former self. A resource embodying 30 years of accumulated expertise "will be thrown away," says SSIE vice president Donald Elliott.

Smithsonian officials won't comment pending forthcoming talks with the House and Senate committees. Neither will NTIS director Melvin Day, who says he doesn't know what position the Commerce Department will take.—**Constance Holden**

Study Shows Formaldehyde Is Carcinogenic

A New York University (NYU) study has provided "decisive confirmation" of industry findings that formaldehyde is an animal carcinogen, according to Arthur Upton, chairman of NYU's Institute of Environmental Medicine and former director of the National Cancer Institute.

The new results buttress the position of many leading scientists, including government epidemiologist Peter Infante, that formaldehyde causes cancer in animals. For stating his opinion about formaldehyde, Infante was nearly fired recently by the Occupational Safety and Health Administration (*Science*, 7 August, p. 630). The agency, however, did an about face and dropped its proposal to dismiss Infante.

The NYU findings will no doubt be seriously weighed by the Consumer Product Safety Commission, which is currently considering whether to ban the use of urea formaldehyde foam

insulation. "We're reviewing a truckload of comments," said Peter Preuss, associate executive director for health sciences at the consumer agency. He said that an agency panel is to make its recommendation to the commission by the end of November. Several months ago, Canada banned the use of urea formaldehyde foam insulation, pending a review of additional scientific data. Massachusetts and, recently, Connecticut have also banned the use of the insulation.

The NYU study is a followup of another experiment by researchers there who found that a combination of formaldehyde and hydrochloric acid caused cancer in rats. The two chemicals were then studied separately and the results support the original findings, Upton said in a letter to the heads of several government research institutes and OSHA.

Formaldehyde alone caused nasal cancers in 10 of 100 rats exposed to 10.6 and 14.6 parts per million, Upton reported. No cancers appeared in the 100 controls. He noted that the researchers have not observed "a single grossly visible spontaneous nasal cancer in 1920 control rats over a period of 14 years." Some industrial workers are exposed to levels of formaldehyde up to 10 ppm. Hydrochloric acid, when tested alone, did not induce any nasal cancers, Upton said.—**Marjorie Sun**

Round Two of Budget Cuts Is Approaching

The Reagan Administration economic program has produced an early casualty: the projection first made last March that the 1982 budget deficit would be only \$42.5 billion no longer holds up. Congressional budget experts say that high interest rates, slow economic growth, and an unexpectedly fast rate of federal spending have combined to increase the expected deficit by \$15 to \$18 billion. As a result, Administration officials and a number of congressmen are on a search for budget reductions beyond those approved in the penurious frenzy of July, before the congressional recess.

White House and public attention

has recently been focused on potential cuts in the budget of the Department of Defense, either in 1982 or succeeding years. Most sources predict that the Pentagon research budget will remain intact, and that cuts will be made instead in manpower and in the quantity of new weapons that are purchased.

At least one Congressman, Representative William Dannemayer (R-Calif.), wants any further cuts distributed instead over a range of non-defense programs, including several in the science area. A list that he is circulating on Capitol Hill includes a \$400 million reduction in the National Aeronautics and Space Administration budget, a curtailment of bilateral science exchanges with Eastern European nations, and the complete termination of the \$12.5-million congressional Office of Technology Assessment.

Budgets for the National Institute of Health, the Energy Department, and the Interior Department have yet to be approved by Congress, making them particularly vulnerable targets.

—R. Jeffrey Smith

NSA Seeks Research Proposals

On 24 August at a workshop in cryptography held at the University of California, Santa Barbara, a representative of the National Security Agency announced that the agency is actively seeking proposals for research grants. Larry Hatch of the NSA explained that the NSA wants to fund basic research in cryptography and computational mathematics. Investigators can expect their results to be unclassified and can expect to publish their work. But, Hatch warned, the NSA "reminds researchers to be concerned about the possibility of classification."

The NSA requests that researchers send it copies of their papers before submitting to journals. It requires that papers be sent to it at the same time as they are sent to journals. Its budget for this program is \$600,000 for the current fiscal year, \$1 million for next year, and \$1.2 million for the year after next. "It will take 10 years to

judge if this is a successful program," Hatch estimates.

So far, the NSA has received a number of oral inquiries about its grants and has been sent several research proposals. It recently awarded \$96,000 to a group headed by Martin Hellman and John T. Gill III of Stanford University and plans to fund another group of researchers in California as well.

Hatch explains that the NSA decided to start supporting cryptography research "in order to get good cryptography in the public sector. In general, it makes us aware at NSA of cryptography research that *might* be a problem. And, it's partly to help build good public relations."

A number of the investigators who heard Hatch speak seemed a bit hesitant about accepting the NSA's conditions. In particular, they questioned the requirement that they submit pre-publication copies of their work to the agency, fearing that their work might be classified. Hatch could only reply that the NSA does not expect to classify the basic research it funds. But, as a researcher in the back of the room murmured, "when you make a pact with the devil. . . ."

—Gina Bari Kolata

Nuclear War Worse Than Atomic Power, Say M.D.'s

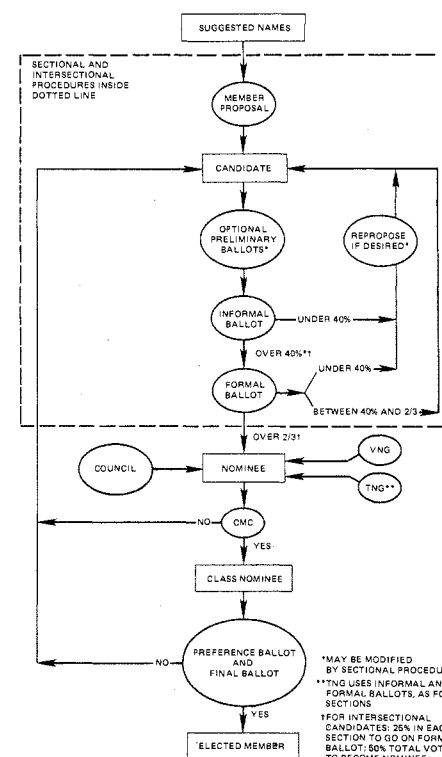
Seventy-one physicians who are members of the National Academy of Sciences have sent a letter to newspapers across the land urging nuclear arms reduction, and warning that "our civilization would perish in an atomic war." Unlike some antinuclear groups, the signatories take care to decouple the issue of nuclear war from nuclear power. "We stress that the possible health hazards of nuclear energy are negligible as compared with the medical consequences of thermonuclear war," says the letter.

The letter was prepared by Arno G. Motulsky and Paul B. Beeson of the University of Washington. In an accompanying statement they argue that public education on the realities of nuclear war may be "our best hope" in influencing policy-makers.

—Constance Holden

How to Become an Academy Member

FLOW CHART FOR NOMINATION AND ELECTION PROCESS



Groucho Marx's observation that he wouldn't want to belong to any club that would have him for a member went to the heart of the matter, that the essence of a club is exclusivity. This poses a problem for clubs that depend nominally on some inclusive principle, such as merit or whatever: just about anybody with a claim to the cited quality can join, as is the case with Mensa, the club for high IQ scorers. But inclusive clubs can acquire some of the cachet of the real variety by making the entry requirements sufficiently Byzantine that no one quite understands the election process. The flowchart above diagrams the electoral process of the National Academy of Sciences. The acronym VNG stands for "voluntary nominating group," an ad hoc cabal of 20 members who may support a particular candidate who might not get thrown up by the normal route. The Academy's ruling council may itself act as a VNG.

—Nicholas Wade