

Electron accelerators

Southern US project delayed

Washington

THE group of US universities unexpectedly selected last year to build a major new electron accelerator has begun hesitantly. After a year, the project still has no director and, in the absence of a definite estimate of construction costs, Congress is balking at appropriating the full amount requested by the Department of Energy (DoE) for the project, now known as the Continuous Electron Beam Accelerator Facility.

The Southeastern Universities Research Association (SURA), a consortium led by the University of Virginia, was chosen last year by the Nuclear Science Advisory Committee (NSAC) to build the new machine at a site in Newport News, Virginia.

The decision set off a long political battle when Argonne National Laboratory, which had hoped to win the committee's recommendation, took its case directly to Congress and the Secretary of Energy. Traditionally, the physics research community has accepted as final the decisions of NSAC, which is made up of nuclear physicists and is formally an advisory body to DoE.

The fight between Argonne and SURA may have played a part in the slow start of the project. James McCarthy, a professor of physics at Virginia who is acting director of the accelerator, said that last year's fight gave the project a "political visibility" which provided greater congressional scrutiny, even after the Secretary of Energy had settled the matter last summer in SURA's favour.

The House of Representatives approved the administration request of \$5 million for research and development and \$2 million for construction in fiscal year 1985, but the Senate, complaining about not having a detailed cost estimate or a clear justification for the project, cut the figures to £2.5 million and zero respectively. At the bidding of Senator Bennett Johnston, the senior Democrat on the Senate Energy Committee, the Senate also asked DoE to provide a five-year plan for nuclear physics that would include the options of going ahead with the SURA accelerator or dropping it.

Although SURA would still be allowed to go ahead with the detailed architectural and engineering design work it had called "construction" in its budget request, the Senate's elimination of construction funds serves notice that the future of the project is by no means certain. It is generally difficult to kill a project once it has been accorded a line-item construction authorization.

SURA originally proposed a budget of \$20 million for next year, but backed off in the face of congressional complaints that the ultimate cost is uncertain. SURA's original proposal was that the total cost

would be about \$100 million, but NSAC, considering that unrealistic, increased it to \$150 million. In testimony to Congress this spring, McCarthy mentioned a figure of \$225 million. Although most of the increase can be explained by inflation, there appeared to be some new items (such as increased office space).

Some of the Senate's caution may stem also from worries about whether the United States can afford such projects if it is to go ahead with the massive proposed Superconducting Super-Collider, which may cost \$3,000 million.

D. Allan Bromley of Yale University, who chaired the NSAC panel that recommended SURA, said that the physics community still considers the project to be a first priority. He said that although there is widespread disappointment that more progress had not been made, much of the trouble is a result of a "Catch-22" dilemma; SURA cannot attract a director without assured construction funds, and cannot get assured construction funds until it has a director and a definite design.

According to McCarthy, an offer has been made to a "leading accelerator physicist", who will decide by 1 July whether to accept the directorship. That date is also when SURA will receive \$1 million appropriated by the Virginia legislature and an additional \$1 million that Congress has just allocated to DoE to "reprogram" the project. The funds will allow SURA to begin filling 9 senior and 15 junior positions on the scientific staff.

Stephen Budiansky

Computer theft boom

Washington

A SURVEY of US companies and government agencies has provided the first systematic evidence of how widespread computer crime has become. Of the 283 organizations that responded, 72 reported "known and verifiable" losses as a result of computer crime in the past 12 months. The average loss was in the range of \$2-10 million, but one organization reported losing more than \$100 million.

The survey, conducted by the American Bar Association, defined "computer crime" quite broadly to include embezzlement, theft of software and even the unauthorized use of computers for personal programming. The last was found to be the most common "crime", reported by 62 respondents; next in line was the theft of software, reported by 45, and use of computers for theft of assets (44).

While it is impossible to extrapolate the survey's results, the bar association states that "given the small number of organizations reporting these large losses . . . the total loss figure nationwide would appear to be enormous." The survey was sent to 1,000 organizations. Two-thirds of the identified perpetrators were employees of the organization, most often computer programmers.

The bar association called for the enactment of federal legislation against computer crime to aid in the reporting and prosecution of such incidents. Existing statutes that may be applicable, such as wire fraud, trespassing and embezzlement, carry penalties that the association said are often "far from commensurate" with the seriousness of computer crimes.

Stephen Budiansky

Academic ethics

Perils of scholarly plagiarism

Palo Alto

A distinguished Stanford University professor resigned as chairman of the department of medicine last week after a university ethics committee found him guilty of "grossly negligent scholarship". Dr Kenneth Melmon, who keeps his faculty position, was censured for plagiarizing roughly a quarter of a chapter in an endocrinology textbook. The committee said that no fraud had been committed and that Dr Melmon had had no conscious intent to deceive.

Trouble arose when the publisher of another medical text, *The Pharmacological Basis for Therapeutics*, found that large portions of that had appeared in Dr Melmon's chapter contributed to the endocrinology book (see *Nature* 5 April, p.489). At the time, Dr Melmon said his friend and editor of the endocrinology book, Dr Robert Williams, had urged him to use portions from the pharmacology book, promising that permission and at-

tributions would be secured. Dr Williams died, however, while the endocrinology book was being edited and his personal papers were later destroyed.

The Stanford ethics committee now says that it accepts Dr Melmon's explanation but has nevertheless censured him for his "recklessness" and "carelessness in dealing with the intellectual properties of others". He violated "the fundamental norms of the academic profession".

Dr Melmon was responsible for ensuring that proper attribution was incorporated into the chapter, the committee says; he should have checked that it was done properly.

Dr Melmon said he was resigning his chairmanship because "the mistake was a serious one". A clinical pharmacologist, he holds the Bloomfield endowed chair in Stanford's department of medicine and is a member of the Institute of Medicine of the National Academy of Sciences.

Sandra Blakeslee