Texas Lands the SSC

Location of the "Ronald Reagan Center for High Energy Physics" in Texas seen bolstering international interest in project

ENERGY SECRETARY John Herrington has chosen Texas as the host state for the world's largest proton-proton particle accelerator. The selection of the state is expected to add needed momentum to the $5.3-billion project, which this summer had two-thirds of its budget request denied by Congress. The state's powerful congressional delegation is certain to give the Superconducting Super Collider (SSC) an added push and Texas' pledge of $1 billion will make the project financially more viable.

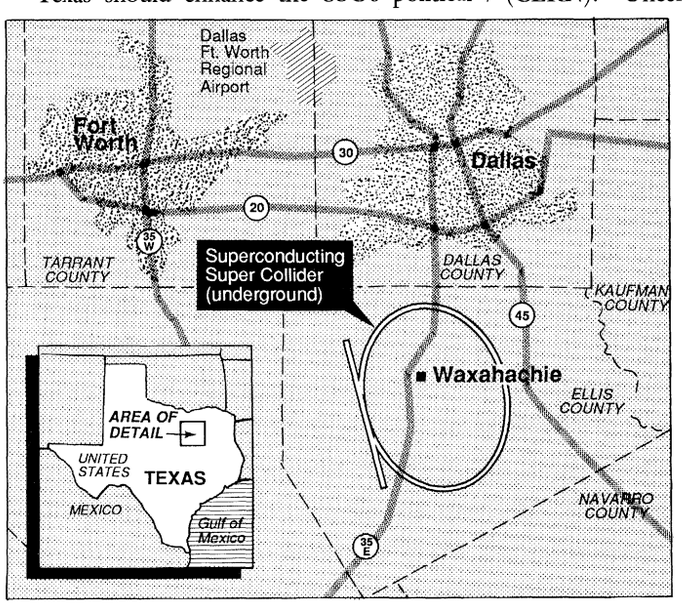
Department of Energy (DOE) officials said the 16,000-acre tract south of Dallas was selected because it got the best overall score in the department's evaluation of sites in Arizona, Colorado, Illinois, Michigan, North Carolina, Tennessee, and Texas. Herrington stressed that the choice of the Ellis County, Texas, site was based primarily on geology and tunneling, regional resources, environmental conditions, and other preestablished factors.

He denied allegations that the state's pledge of funding or political considerations affected the department's decision. Senator Alan Dixon (D–IL) and other House and Senate members have intimated that the move to site what is being called the "Ronald Reagan Center for High Energy Physics" in President-elect George Bush's home state of Texas was influenced by the outcome of the presidential election.

Despite these charges, the selection of Texas should enhance the SSC's political prospects. The project will have the support of Texas legislators such as James Wright (D), speaker of the House of Representatives; Senator Lloyd Bentsen (D), chairman of the Senate Finance Committee; and Senator Phil Gramm (R), coauthor of the Gramm-Rudman-Hollings deficit reduction law. Similarly, the state's pledge to absorb $1 billion of the project's cost may encourage potential foreign participants to take the SSC more seriously. With Texas putting up close to 20% of the project cost, says Samuel Ting of the Massachusetts Institute of Technology, European physicists now "think the project probably will be built."

To date few countries have indicated that they will contribute substantial financial support to the project. So far, Japan seems most interested in providing assistance. The Japanese have indicated to DOE officials that they might provide $400 million of in-kind support for the 53-mile, racetrack-shaped collider. India has pledged $50 million in support and the Italians also have said they would participate to some degree in building the machine, which would produce collisions with a center of mass energy of 40 trillion electron volts (TeV).

European Community members, however, have not agreed to provide substantial material support for the SSC—largely because physicists there want to build the 20-TeV Large Hadron Collider (LHC) at the European Laboratory for Particle Physics (CERN). Uncertainty about Congress funding the SSC also has caused European physicists to discount the U.S. project. Ting, who conducts much of his research at CERN, predicts that European Community members now will rethink their positions on providing components and other kinds of financial aid to the SSC.



The future of the super collider, however, is far from guaranteed. Disgruntled legislators from states that were passed over are pressing for the General Accounting Office to review how DOE conducted its site selection process. If allegations of bias in the site rankings are confirmed, says Peter Carruthers, a University of Arizona physicist who worked on the state's site proposal, "I am afraid that the SSC might be lost."

More worrisome, though, is the ever-present federal budget deficit. Congress must find a way to ax $30 billion from the federal deficit in 1990 and more in following years. To do this will require making tough decisions on funding priorities and trimming back some programs, says Senator Gramm. Moreover, the willingness of legislators to dramatically increase SSC funding from its current level of $100 million may hinge on whether sufficient money can be added to a broad range of research accounts at DOE and elsewhere to prevent ongoing research from being squeezed out by the collider.

In any case, Administration officials and legislators doubt that construction will begin in 1990. It is more likely, they say, that Congress would allow for a doubling of the SSC budget in fiscal year 1990 to keep R&D and project planning activities on schedule. Construction authorization, they observe, could be delayed until 1991—after the department demonstrates that the SSC's magnets work and after Congress has received updated estimates of total project costs and international cost-sharing.

■ MARK CRAWFORD

Breuning Sentenced

Psychologist Stephen E. Breuning was sentenced on 10 November to spend 60 days in a work-release program for falsifying research on drug treatment of mentally retarded children.

U.S. District Judge Frank A. Kaufman also ordered Breuning to pay back $11,352 in salary to his former employer, the University of Pittsburgh, to serve 250 hours in community service, and to stay out of the field of psychology for his 5-year probation period. Breuning will serve his 60 days in a halfway house near his current home in Rochester, Michigan, where he now owns an audio equipment store. He has agreed to avoid work in the field for 10 years.

Breuning had faced up to 10 years in prison and $20,000 in fines for falsifying research in support of grant applications for more than $200,000 to the National Institute of Mental Health in the early 1980s (*Science*, 7 October, p. 27). His work on the use of Ritalin and Dexedrine with hyperactive mentally retarded children had considerable influence in the field before the fraud was uncovered. ■ GREGORY BYRNE