

Hutchinson says he is pleased with the settlement, even though it won't cover the cost of taking his case to the Supreme Court, estimated at \$50,000. "His opinion of my research was not the issue. The issue is that when a legislator describes another person, he must do it accurately." Hutchinson says that more than 3000 contributions from academics, government employees, and others have paid for half of his legal bill. "Everyone has been extremely generous," he says.

As to what became of the work that led to the award, Hutchinson says he has used it as the basis for more than 30 published articles. The Office of Naval Research, which paid for some of it, says, "At this time, the results have not been directly utilized by the Navy." A spokesman says that potentially the research will be used to help identify individuals with a high tolerance for aggressive stimulation, particularly those who might work in submarines and patrol planes. It will serve as "a baseline against which future research can be compared," the spokesman said.

On 27 March, Proxmire announced he was giving his latest Golden Fleece award to the National Institute for Mental Health (NIMH), which provided \$1325 to study "why bowlers, hockey fans, and pedestrians smile." The study, part of an ongoing \$75,000 NIMH contract with Robert Kraut of Cornell University, actually involved videotaping the smiles and rolls of some bowlers from behind a pin-setting mechanism. "While I have no objections to a study of smiling as such, involved here is a question of priorities. In this period of double-digit, galloping inflation, should the hard-pressed taxpayer be asked to pay for an academic version of Bowling for Dollars?"

NIMH responds that the study might be useful to therapists, teachers, policemen, judges, and political leaders in determining "the genuineness of peoples' messages." The agency also said that Proxmire's press release was worded so as to leave the impression that the entire contract was expended on this single study.

Proxmire, who is chairman of the Senate appropriations subcommittee that considers the NIMH budget, says, "I smilingly award my Golden Fleece of the Month . . . and I leave it to NIMH

to determine whether my smile is a deception, an emotional state, or a sign of friendliness."

## SST Supporters Fly Above the Economic Fray

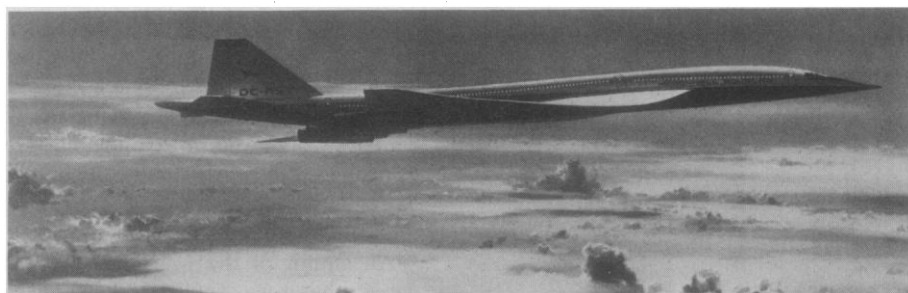
Supporters of an American supersonic transport (SST) aircraft are stirring once again after lying low for nearly a decade. The aerospace manufacturers and their backers in Congress have quietly asked that the National Aeronautic and Space Administration's (NASA) ongoing SST research effort be granted at least a fivefold increase in funding, so that the federal government can embark on a new SST construction program by the end of the decade.

This request was first made last year, but last week it received a major boost from the congressional Office of Technology Assessment (OTA),

projected subsonic aircraft. The previous American SST venture was killed by Congress in 1971 for similar cause.

Although most aircraft companies are searching for ways to cut their fuel bills by at least 20 percent, the SST envisioned by OTA will use between 50 and 100 percent more fuel per mile traveled than any other plane, cost the airlines 25 percent more, and necessitate passenger fares 20 to 30 percent above the most expensive first-class seat on a subsonic aircraft. Despite improvements in aerodynamic shape, engines, and construction materials, the SST as envisioned by OTA will cost \$1.25 billion (in 1979 dollars), as opposed to \$80 million for an existing SST, the British-French Concorde.

This unappealing balance sheet becomes an argument in the OTA report in favor of government support. No private corporation, says the report, could raise the \$6 billion to \$10 billion necessary for design, development, and start-up of the new SST, even



*The latest in SST designs [NASA drawing]*

which said an increase in NASA's research funds was necessary in order to "maintain the U.S. SST option." Support for the SST generic research program appears "appropriate," the agency said, largely because the United States would miss out on \$50 billion in potential sales between 1990 and 2010 if it decided not to pursue it. Current proposals call for boosting NASA's research funds from \$10 million annually to an amount between \$560 million and \$1.9 billion spread out over the next 8 years.

Though the overall OTA report recommends a greater research effort, the picture it paints of the SST's future is decidedly bleak in its details. Most important, the report concludes that despite the cost-saving advances in technology that will occur by 1990, the SST will remain considerably more expensive and less efficient than any

though the industry will benefit if the project ever breaks even. Consequently, the OTA suggests a domestic or international funding venture, similar perhaps to the Communications Satellite Corporation. There would still be other obstacles to overcome, however, such as environmental concerns and noise problems (*Science*, 14 March).

In lieu of taking OTA's advice, Congress could take its lesson from the example of the Concorde, which has been a big money-loser for its sponsors. Production lines were closed last September, with all of the planes sold at loss or given away to French and British state-owned companies. Concorde engineers purportedly failed to anticipate the high cost of fuel—an obstacle apparently yet to dissuade the contemporary SST enthusiasts.

**R. Jeffrey Smith**