

described in the 1983 abstract that was never presented, Breuning said some of the raw data were several years old and had been destroyed to protect patient confidentiality. In a second conversation, he added: "I'm not sure if data [are] lost that means there's a problem with the abstract." He referred further questions to his lawyer, Thomas E. Coval, who, when contacted, declined to comment.

Breuning resigned from Pittsburgh in April 1984 while the university's first investigation was under way. Pittsburgh officials will not comment on the inquiry, which was confined to the tardive dyskinesia studies that were conducted before Breuning came there. But according to Schriver's report, the inquiry did confirm that raw data from Coldwater were unavailable.

Pittsburgh informed NIMH in the summer of 1984 that it had no grounds to take action against Breuning for any work he performed there, according to a letter to Sprague from NIMH acting director Larry B. Silver. However, Silver wrote, "because several issues remain unanswered . . . the NIMH will conduct a comprehensive investigation of the allegations" against Breuning. It was at that point that Lorraine Torres, an NIMH official in charge of the case, asked Schriver to begin an investigation.

Then in January 1985, reportedly under considerable prodding from Schriver, Pittsburgh officials began their second investigation, which this time included a look at Breuning's work at the university's Western Psychiatric Institute and Clinic. The results were delivered in mid-1985 to Friedhoff's panel, which the NIMH appointed in early 1985. Schriver parted company with Torres on the conduct of the matter and left the case in that summer.

Friedhoff, whose panel has interviewed the various principals—some of them several times—will not comment on the case. The few outsiders who know about the Breuning affair are puzzled by the slow pace of the investigation. Sprague finds it "reprehensible" that the government is pursuing its responsibilities "with such glacier-like speed." Breuning himself says that although "certain people have heard only one side of the story" he doesn't feel handicapped by the delay since there are "no major problems" to be revealed.

Torres says that a "very big" draft report has been submitted to NIMH but it will be months before the results are made public. First, Breuning has to review it and his comments must be considered by the panel. Then, the heads of NIMH and its parent agency, the Alcohol, Drug Abuse, and Mental Health Administration, have to review the final version. ■ **CONSTANCE HOLDEN**

## Senator Blasts Administration's Reinterpretation of ABM Treaty

A Democratic senator has blasted the Reagan Administration's assertion that space-based missile defenses can be developed and tested without contravening the 1972 Antiballistic Missile (ABM) Treaty. Senator Carl Levin (D-MI) announced on 1 December that his own review of the classified negotiating record leads to the inescapable conclusion that the treaty forbids such development and testing. Moreover, Levin argues that his restrictive interpretation of the treaty is shared by virtually everybody who was involved in the negotiations.

Exactly what is permitted under the ABM Treaty emerged as a central factor in the

up with a new interpretation. A review of the negotiating record, he said, indicates that the treaty places no limits on development and testing of systems that were not "current" in 1972, when the pact was signed. This new interpretation would permit all work on SDI to proceed to the point of actual deployment.

The State Department's new interpretation sparked a storm of protest, and earlier this year the Administration announced that it would abide by a more restrictive reading of the treaty that prohibits testing of anything more than subcomponents of SDI systems. However, the Administration said it reserves the right to switch to Sofaer's more liberal interpretation at any time.

Several members of Congress sought access to the classified negotiating record to check Sofaer's conclusion. After a lengthy tussle, the State Department agreed to provide the record to members of the Senate Armed Services Committee. Levin is the first to announce his findings.

He argues that the process used by Sofaer to review the record was "fatally flawed." Levin accuses Sofaer of being selective in his use of quotes from 1972 Senate hearings on the treaty, and he complains that Sofaer failed to interview officials involved in the negotiations to ascertain their understanding of what the pact actually limits. Levin says his own review of the record and interviews with the negotiators supports a restrictive interpretation of the treaty: it permits research, development, and testing of fixed land-based systems, but places sharp limits on development and testing of space-based systems.

Levin's interpretation was supported by two people involved in the negotiations—Albert Carnesale, currently a professor of government at Harvard, and Sidney Graybeal, now vice president of System Planning Corporation—at a AAAS symposium on arms control on 4 December. They noted that there was no disagreement in 1972 on what the treaty meant, and Graybeal pointed out that one negative vote in the Senate was cast by former Senator James Buckley precisely because the pact restricted development of exotic systems.

Levin has called for a new, independent review of the treaty. The State Department has declined, however. In a statement issued on 1 December, it defended Sofaer's interpretation and said "an outside study of the ABM Treaty is unnecessary." ■

**COLIN NORMAN**



**Senator Levin:** *The State Department's review of the record was "fatally flawed."*

Reykjavik summit meeting between President Reagan and Soviet leader Mikhail Gorbachev (*Science*, 31 October, p. 533). Gorbachev sought to confine the U.S. Strategic Defense Initiative (SDI) to the laboratory—a restriction that would have gone well beyond the treaty—while Reagan insisted that the program not be held back.

Disputes over the interpretation of the treaty have not been limited to the summit. In fact, a debate has been raging in the United States for the past year. Until recently, it was generally accepted that the treaty permits research, development, and testing only of ABM systems that would be deployed in fixed positions on land, and that it limits work on "exotic" space-based systems to research. The dispute essentially revolved around what types of research on exotics are permitted.

Last October, however, the State Department's legal counsel, Abraham Sofaer, came