mittee members to have the privilege of freely expressing their thoughts. . . . Often times, opinions expressed by members of the committee are subject to change as the result of expressions of the views of other members just as the opinions of members of the board of directors of any organization are subject to change under like circumstances. I do not see what good purpose could be served by admitting the general public to a meeting of this kind. After all, such a meeting is merely a method of exercising the thinking process.

The reformers counter that committee members are really doing more than thinking—they are deciding public questions. Further, the suggestion that members generally go into closed sessions with open minds would be more reassuring if it were not common knowledge that many of them have made private commitments to special interests.

Other arguments often made against open mark up sessions are that compromise and vote trading are inhibited, and that the work is slowed down because members insist on making lengthy statements. That political posturing will in fact go on in such open sessions no one could deny. But the charge that compromise is discouraged does not seem borne out by the experience of the House Education and Labor Committee. What happens is that members make deals on the side, outside the public mark up sessions. The public sessions are nevertheless considered revealing because, even though some of the actors have rehearsed their roles, they are all on stage to be judged for what they say and how they vote.

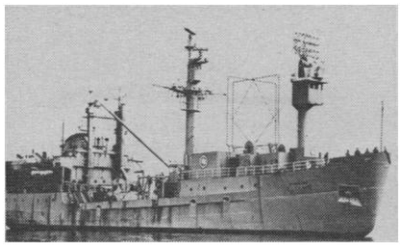
The prospects for passage of legislation as sweeping as Senator Chiles' Sunshine bill are, at the moment, gloomy. Opposition to any proposal more far reaching than the open-meetings resolution now pending in the House caucus will be potent and strategically placed. In the House, for instance, the Majority leadership is still relatively cautious and conservative on the secrecy issue. Speaker Carl Albert, John J. McFall (Democratic Whip), Wilbur Mills (chairman of the Ways and Means Committee), and numerous other committee and subcommittee chairmen clearly are opposed to the Sunshine bill and its uncompromising insistence on open congressional government. Similarly, in the Senate, to judge from the open-meetings resolution recently adopted by the Majority caucus, the kind of reform of secrecy practices desired by many of the grandees there is one that obfuscates the secrecy issue.—LUTHER J. CARTER

Budget Cuts Scupper NSF's *Eltanin*

It was Christmas day 1972, and the National Science Foundation's research ship *Eltanin*, operating off the southern coast of Australia, had just received a radiogram bearing President Nixon's holiday greetings to all the government's ships at sea.

Then came a second radiogram from Washington, bearing a different kind of greeting. The gist of the message from the National Science Foundation (NSF), as one scientist aboard the ship recalls, was that "our research program was terminated immediately and we were fired."

Thus did the long arm of the federal budget cutters reach out swift and sure to the Indian Ocean in pursuit of the President's goal to hold down federal spending in the current fiscal year. And thus also ended the 11-year career of a vessel the NSF describes as the only ship in the world devoted to full-time research in the oceans surrounding Antarctica. The *Eltanin*'s sudden recall spurred 15 of the 50 or so scientists involved in the ship's research program to fire off a telegram of protest to H. Guyford Stever, the NSF's director, but the ship's fate seems sealed. Although NSF officials say they haven't given up all hope of finding money to keep it running, the ship will probably be mothballed once it reaches home port at Oakland, California.



As it happens, the *Eltanin*'s demise was not entirely unexpected by the 28 scientists and 49 crewmen aboard the vessel. Early in December a radio conversation back to the United States brought rumors of wholesale impoundments of federal R & D money by the Nixon Administration. And indeed, in October, Philip S. Smith, the NSF deputy director of polar research, had told a meeting of scientists whose research depended on the ship that budget stringencies might force a "downward adjustment" of some of their grants and termination of others. A subsequent memo to the scientists indicated that this was a "foundation-wide" problem that stemmed from the President's command to hold federal spending below $250 billion for the current fiscal year.

The *Eltanin* was built in 1957 as an arctic cargo ship for the Navy. As such, it was especially designed for cruising in ice-clogged polar waters. The NSF acquired the ship in 1961 and converted it to a floating laboratory that soon began the first of 55 research cruises around the southern oceans, most of them running for 2 months at a time.

In the intervening years, the ship systematically criss-crossed the southern Atlantic, Pacific, and Indian oceans in a 280° band around Antarctica—amassing geophysical, chemical, atmospheric, and biological data and samples from 2000 separate stations. The vessel was within 2 years of rounding out this most thorough of all circumpolar surveys when the *Eltanin*'s last $1.5 million was impounded.

To be sure, the *Eltanin* was not without its problems. It suffered from academic rivalries between on-board scientists, and, according to Bruce Heezen of the Lamont-Doherty observatory, who served as the ship's chief scientist on its 55th and final voyage, it also suffered an "appalling" quality of maintenance by Australian government shipyards. Nevertheless, Heezen maintains, no other polar research ship in the world could match the *Eltanin* for its range (10,000 miles) and endurance (up to 275 days a year at sea). "You could cancel the work of practically any other research ship in the world," he told *Science*, "and it would be less of a disaster."

Meanwhile, the *Eltanin*'s departure leaves the NSF's *Hero*, a 125-foot trawler, as the only other American research vessel in near-Antarctic waters. And if it ventures very near the polar ice pack, it surely will have earned its name. Although of recent vintage, the *Hero* is built of wood, a material the NSF describes as "cost-effective."—R.G.