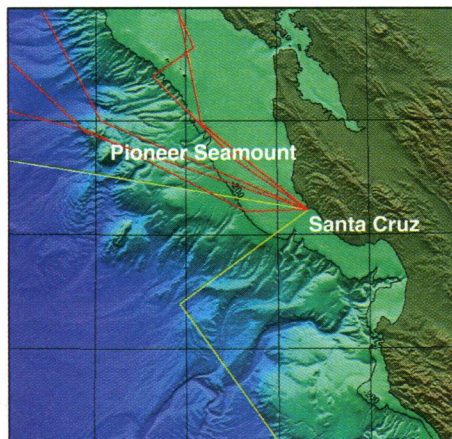


edited by JOCELYN KAISER



Sea routes. Paths of elephant seals tracked this fall by ATOC scientists off California.

Ocean Experiment Finally on Track?

After 18 months of delays and setbacks, including a false alarm triggered by the coincidental deaths of three whales last month, a \$35 million experiment to use undersea broadcasts to study global warming and the effects of noise on marine mammals was set to begin in California this week.

Bad weather forced the Acoustic Thermometry of Ocean Climate (ATOC) project to postpone its launch date of 7 November, when scientists planned to begin transmitting a 185-decibel hum from Pioneer Seamount, an undersea ridge 55 miles off San Francisco. Then three dead humpback whales turned up in the area, prompting an investigation by the National Marine Fisheries Ser-

vice to see whether the cause could have been sounds emitted during testing of the ATOC loudspeaker. ATOC was cleared last week of any connection to the whale deaths, and the project was to proceed on 1 December.

The experiment differs from ATOC's original plan, which called for measuring ocean temperatures by detecting how fast the

hum travels to receivers around the world. In response to protests from environmentalists, who claimed the sound could harm marine mammals, ATOC is now having its biologists run the show. They'll survey species in the area, then begin turning the hum on intermittently for 2 days and off for 4 days while watching whales, seals, and other marine mammals for changes in behavior. ATOC oceanographers will take what data they can when the sound is on.

The ATOC team hoped to establish by late next year whether the sound drives animals away from their habitat. But the latest delay could cost them critical data, because many humpbacks have headed south for the winter by now, says Dan Costa, a marine biologist at the University of California, Santa Cruz, and

leader of ATOC's Marine Mammal Research Program in California. ATOC's funding runs out in September 1996.

Chief Chosen for U.K. Research Council

Oxford University biochemist George Radda will likely be tapped to head the United Kingdom's influential Medical Research Council (MRC) when Sir Dai Rees, the current head, retires next September. Sources say Radda is the favored candidate from a short list of three interviewed last month by the government's Office of Science and Technology (OST), which handles senior-level appointments. Radda, who now heads the MRC's Biochemical and Clinical Magnetic Resonance Unit, would control a budget of \$415 million as chief of the MRC, Britain's largest source of public funds for biomedical research.

Radda, 59, is seen as a somewhat surprise choice, given that his career is based more firmly in research than administration. But colleagues such as David Gadian of the Institute of Child Health in London point to his scientific leadership in developing nuclear magnetic resonance for noninvasive analysis of tissue metabolism. OST officials would not comment on the appointment earlier this week, and no announcement is expected until the end of the year.

Oncomouse Patent Debate on Hold

A review of a controversial animal patent in Europe that some had hoped would reach a climax this fall now appears to have stalled. The issue arose at a hearing on objections from animal rights and other groups to a patent for a mouse engineered to be susceptible to cancer—viewed by some as a test case for patents on life forms. But the public session ended last week without resolution, and a decision by the European Patent Office (EPO) on whether or not to revoke the patent could be months away.

European patent number 0169672 was awarded to Harvard University and DuPont in 1992 by the EPO, the first the office had ever granted on an animal. The patent covers transgenic mice—and other animals yet to be developed—with an activated oncogene predisposing them to cancer. Seventeen groups have since filed petitions opposing the patent under the European Patent Convention, with some arguing that such transgenic animals experience a great deal of suffering.

At a hearing in Munich that began on 21 November, EPO officials suggested that the patent's claims may have to be reformulated, and the patent owners quickly complied. One revision would restrict the scope of the patent to onco-rodents only. Before it could reach a conclusion, EPO closed the hearing abruptly, asking parties to submit their views on the proposed new claims in writing.

Peter Stevenson of Compassion in World Farming, one of the parties, says if the patent's scope is restricted, it would send a message "that it would be hard to patent transgenic animals at the EPO." But biotech firms don't regard the case as setting a precedent, says Keith McCullagh, chair of the UK BioIndustry Association. "It's a sideshow," he says, to a debate on biotech patents in the European Parliament, which is to consider a draft directive on the matter in January.

Communists Promise to Save Russian Science

With elections for seats in the Russian Duma scheduled for 17 December, only one major party is campaigning hard for votes from the country's struggling scientific community. Who's beating the pro-science drum? The modern Communist Party.

Although Russia's scientific elite is able to do world-class research thanks to peer-reviewed grants from the government and Western sources, most scientists are floundering on the pittance they receive from the Russian Academy of Science. In the Soviet Union, scientists were members of a well-funded, prestigious community; now each earns on average \$80 a month, less than a third the wage of a Moscow city bus driver.

It's this disenfranchised lot the Communists are wooing in stump speeches and appearances at research strongholds such as the Siberian science city of Novosibirsk. If the Communists win a majority in the

Duma—the lower house of Parliament that drafts the majority of Russia's laws—they say they will push through legislation that would double or triple funding for science. "The position of science during the Soviet era was good; it was a stable system," says one Moscow-based scientist who plans to vote for the Communists. "Now science is not stable."

However, the Communists' agenda also calls for rolling back economic reforms and shoring up Russia's military—a strategy many scientists dislike. Says Novosibirsk physicist Semen Musher, "Modern Communists only promise to support science for military research," a relatively weak sphere of Russian science. Moscow pundits predict the Communists will make major gains in the Duma at the expense of the squabbling market-reform parties. If so, Russian scientists may gain an all-too-familiar benefactor.