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E.G. Sherburne Jr. Joel Greenberg Dietrick E. Thomsen

Laurie Jackson Wendy McCarren

Bruce Bower Joanne Silberner Stefi Weisburd Julie Ann Miller Janet Raloff, Ivars Peterson

Jonathan Eberhart Susan Welch Gilday

Lisa Davis Jane M. Livermore

Donald R. Harless

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Senior Editor/ Physical Sciences

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Editor

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## **This Week**

244 Mental Skills in the Elderly: Lost and Found 244 Microsketching an underwater surface 245 Physics to the end of the century Extremely magnetic degenerate dwarf 245 The genes behind vision's palette 246 What's SNOO at ocean ridges? 247 247 Cell aging: A process of oxidation?

### **Research Notes**

248 Behavior 248 Computers

249 Science & Society

### **Articles**

251 Rinsing Away Decay

> Cover: The protective surfaces of teeth are made of microscopic mineral crystals. Those shown in this scanning electron micrograph are only about a thousandth of a hair's breadth thick. Tooth decay gets its start when acid dissolves more mineral than saliva can reform, something that's starting to happen in the enamel pictured here. But the chemical dentistry performed by some experimental mouth rinses can painlessly repair decay while it is still invisible to the dentist. (Photo: John Featherstone/Univ. of Rochester)



# **Departments**

243 Letters 250 Commentary

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# Letters

## Altered data

"Secrecy and the Seafloor" (SN: 3/15/86, p. 170) brings to the forefront some interesting questions. While the Navy and NOAA are both sure that their positions are correct, we need to consider how the Defense Department's position could have altered history if it had been truly policy in times past.

Imagine sending Lewis and Clark off on their explorations with instructions to produce "altered" data, so that the native Americans could not sneak up on Washington because their maps showed hills and rivers in the wrong place.

Imagine funding space probes at a cost of billions to study the solar system, galaxies and deep space, but programming them to show the earth in a different orbit so extraterrestrials would not be able to find us in the event of an invasion attempt.

Or imagine Rand McNally publishing state maps with a town or two placed somewhere different just to be sure that a nearby "sensitive" installation would be safe from attack because it could not be found. Pity vacationers

wandering aimlessly through central Oklahoma searching in vain for Disney World, or the school kids from Meddybemps, Maine, collecting soup labels to fund a trip to Spokane to see the Statue of Liberty.

Scientists and others working with altered or incomplete data will produce only altered or incomplete results. I would sooner have a beautiful leather-bound volume of blank pages than one that contained invalid infor-

Jeff Orchard Windham, N.H.

If the concept of national security were examined with the same rigor and discipline most scientists apply to their own work I wonder how much of it would be left standing. And that a spokesperson for the armed forces in a democracy could conceive - let alone express - the question of why a scientific organization (NOAA) should want to collect data "of that quality and resolution" tells us how far the militarization of our society has progressed.

Peter Silverman Philadelphia, Pa.

I found "Secrecy and the Seafloor" very informative but somewhat misleading-more so in tone than in content.

The U.S. Navy has raised national security concerns about the bathymetry maps NOAA is developing as part of our EEZ survey program. I believe the Navy's concerns are legitimate and I share them

I also believe that there is much that is coming out of our survey work that could be of great value to the scientific community without compromising national security. I believe the Navy shares this view. The issue, then, is finding the middle ground between legitimate and compelling concerns.

Far from being an interagency conflict, I believe NOAA and the Navy have made good progress toward a solution. These are complex issues and a compromise cannot be expected quickly. However, I am confident that a compromise will be found that will satisfy very legitimate national security and scientific interests.

Anthony J. Calio Administrator, National Oceanic and Atmospheric Administration Washington, D.C.

243 **APRIL 19, 1986**