

## Science 86 Sold to Time Inc.

On 27 June the AAAS Board of Directors sold *Science 86*, the association's popular science magazine, to Time Inc., publisher of *Discover*. "Deciding to cease publication of *Science 86* was an extremely painful decision for the AAAS Board to make," president Lawrence Bogorad said in an announcement prepared for the press. "It was necessitated by the severe 2-year decline in advertising revenues which has put a tremendous strain on the budget of our nonprofit Association."

Time Inc., which gains *Science 86*'s valuable subscription list through the sale, will fold *Science 86* and fulfill its outstanding subscriptions with copies of *Discover*. Both magazines have been honored by the National Magazine Award for General Excellence, with *Science 86* receiving that prize twice since it was first published by AAAS in the fall of 1979.

Like *Science 86*, *Discover* has been beset by losses in ad revenues recently. In a public statement, AAAS Executive Officer William D. Carey said, "Time Inc. is resolved to continue *Discover* and to be the premier science magazine in the field. To help insure this, Time Inc. has announced its intention to appoint a science advisory board for *Discover*, similar to the one that has existed for *Science 86*. We applaud this initiative and will give them every encouragement for continued success."

Bogorad, in his statement, noted that with the launch of *Science 86* the AAAS "set the pace for a new crop of popular science magazines. . . . We regret that the financial situation made it impossible for the Association to continue publishing the magazine," he said, "but we believe that the mission of *Science 86* will endure." ■

BARBARA J. CULLITON

## Dugway Lab Plans Defended by Defense Department

The Department of Defense (DOD) recently released a lengthy report that justifies its controversial plans to build a new, sophisticated laboratory for biowarfare tests, but has changed its tune slightly to appease critics of the proposal.

Almost 2 years ago, the Defense Depart-

ment proposed rapid construction of a laboratory at Dugway Proving Ground in Utah, arguing that the Soviets have been hard at work conducting offensive research in biological warfare. DOD argues that the facility must be built to develop equipment to protect troops against pathogens that, it says, the Soviets use now and will create in the future with the help of biotechnology.

The proposal won funding by Congress but construction was stopped by a federal judge, who said that DOD had not conducted a proper analysis of the potential effects of the research on the environment. The court action was a result of a lawsuit filed by activist Jeremy Rifkin. The proposal also has been challenged by members of Congress and several prominent scientists (*Science*, 17 May 1985, p. 827), who are worried that the laboratory would raise the risk of biowarfare. They are also concerned that other countries, particularly the Soviet Union, would perceive laboratory studies as offensive research.

In the new report, which was written in response to an order by the House Appropriations Committee, the Defense Department raises for the first time the possibility that it would allow experts outside the military to review the overall activities at the lab. It suggested that reviewers might include scientists who are both members of the National Academy of Sciences and of the Army Board on Science and Technology. The oversight group would review the biotechnology activities of the lab, including studies that would involve the testing of pathogenic organisms created through recombinant DNA techniques. An aide to Senator Jim Sasser (D-TN), who has opposed the new lab, says that the proposal for peer review was "a positive step."

For most of the report, however, the department reiterates its original arguments to justify the laboratory, but in greater detail. It says that the most recent example of biological warfare is the Soviet's use of "yellow rain" toxin in Southeast Asia, a claim that, according to several independent studies, is based on shaky evidence that's getting even shakier (*Science*, 4 July, p. 18). The report also says that developing countries are using genetic engineering for biological warfare, but does not cite any specific examples. It simply asserts that "third world proliferation [of biological warfare] is getting worse. . . ."

The report gives the impression that biotechnology makes it a snap to create new pathogenic organisms that could be used in biological warfare and mass produce microbes. The sophisticated Dugway lab is needed, it argues, because there are not enough nonpathogenic microbes to simu-

late several toxic organisms, such as rickettsia, viruses, or fungi.

The department does not address a key issue raised by critics, who question how the U.S. can keep up with the development of methods to protect troops if novel microbes can be designed and produced easily.

According to the report, the department plans to complete the court-ordered environmental analysis by March 1987. The analysis will be publicly available, it says. ■

MARJORIE SUN

## Cold Neutron Works Nixed by House

The scientific community may have to wait a little longer to conduct experiments on the National Bureau of Standards cold neutron source. Unless the Senate Appropriations Committee produces a funding bill for the Commerce Department that is radically different from House legislation, major construction on the beam line and experiment stations will be delayed at least a year. Despite the House Science and Technology Committee's endorsement of a \$10-million capital program in 1987, the Appropriations Committee declined to fund the undertaking.

In total, the committee approved a \$120-million budget for NBS, \$3.95 million less than President Reagan's request. Although the cold neutron source is the agency's top priority, it was not approved because of a lack of funds. The Reagan Administration had proposed to free up revenue for the project in part by closing down NBS's Center for Building Safety and Center for Fire Research. The Appropriations Committee, however, rejected this proposal. Instead, it provided \$3.11 million and \$5.14 million, respectively, for the two programs. The committee also funded the agency's Institute for Computer Science and Technology at \$8.13 million, \$3.13 million more than the Administration proposed.

The attraction of the proposed facility is that it would provide low velocity neutrons for materials research. The \$27-million project chiefly consists of installing a cold source to cool neutrons to -415 degrees Fahrenheit, a beam line off an existing reactor, and an experiment hall.

The House Appropriations Committee accepted the agency's proposal for a new initiative in fiber optics, providing \$800,000—\$150,000 less than the Administration sought. Similarly, it endorsed the proposed Consolidated Scientific Computer

System, but allocated \$50,000 less than the \$550,000 requested. Finally, the committee is supporting the Administration's proposal to phase out the Research Associates Program, a postdoctoral research activity, by cutting the budget from \$1.9 million to \$259,000. ■ **MARK CRAWFORD**

## NIH Transfers Disputed Monkeys to Regional Primate Center

The 15 former research monkeys that have been in the custody of the National Institutes of Health (NIH) for the past 5 years have been transferred to the Delta Regional Primate Center run by Tulane University in Covington, Louisiana.



Joel Ito/ORPRC

William Raub of NIH has stated that no invasive research will be done on the animals and "every effort will be made to resocialize them including entry into breeding groups." But animal activists, who have created a prolonged stir over the situation, say they are still not happy.

The monkeys were placed in NIH's care as the result of a 1981 court case in which Edward Taub of the Institute for Behavioral Research in Silver Spring, Maryland, was found guilty of monkey neglect. At Taub's lab eight of the monkeys had had the sensory nerves removed from their forelimbs; the rest were controls in experiments on nerve regeneration. People for the Ethical Treatment of Animals, the group that originally complained about Taub's research, has been suing to get the animals released to a Texas animal sanctuary called Primarily Primates. The court rejected their plea on the grounds that the group lacked standing, and it is now being considered by an appeals court in Richmond, Virginia.

NIH, which has spent \$30,000 a year maintaining the unemployed monkeys, has

come under increasing pressure to find a permanent home for them. Recently, at the initiative of Representative Robert C. Smith (R-NH), 306 members of Congress wrote NIH asking that the animals be sent to Texas. NIH said this was unacceptable because the monkeys have lived their lives in cages and might not survive in the social setting of the range.

Last month Smith introduced a "sense of the Congress" resolution reiterating that the monkeys should be sent to a private sanctuary. An aide to Smith says the congressman opposes the transfer to Louisiana and wants the monkeys to "live out their lives in peace at no cost to the taxpayers." The resolution, with 111 cosponsors, is still pending. Smith's aide says her boss finds the issue particularly worthy of attention as a "case of bureaucratic bullheadedness."

Meanwhile, researcher Taub, whose conviction was later overturned, is writing up his research with the aid of a Guggenheim grant. Although he lost his NIH grant, he has not lost the esteem of his peers. He was named a AAAS fellow at the association's annual convention in May. ■

CONSTANCE HOLDEN

## Newman's "Energy Output" Machine Put to the Test

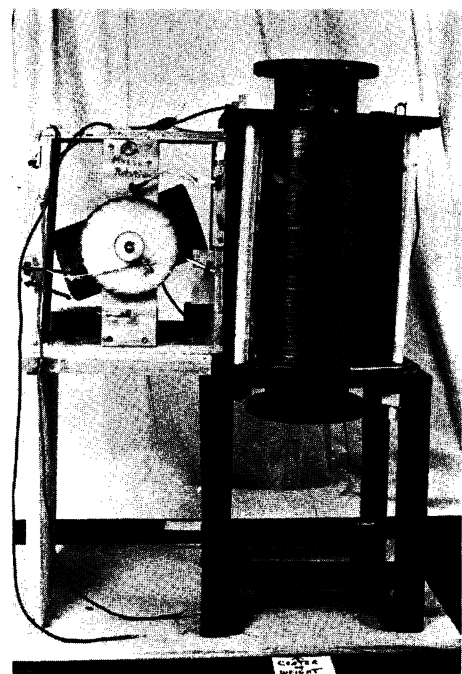
What's a device with a battery pack, a magnet, and a coil wired together? For the past 6 years, Joseph Newman, an inventor from Mississippi, has been loudly proclaiming that it's a revolutionary machine which produces more power than it uses. The National Bureau of Standards recently issued its own verdict after analyzing Newman's machine: "In none of tests did the device's approach 100%. . . . Our results are clear and unequivocal," the bureau said.

Newman has gone to great lengths to try to win a patent on his energy output machine. When the U.S. Patent and Trademark Office indicated in 1984 that the device did not work, Newman sued the agency. He hired a publicist, and the media often portrayed him as an underdog pitted against the scientific establishment. Then the court ordered Newman to submit the machine to the National Bureau of Standards for testing. Newman reluctantly complied.

A physicist and two electrical engineers from the bureau tested the machine in a variety of ways to measure its energy input and output and used instrumentation that is common in research engineering laboratories. The sole power source of the device

was 116 9-volt batteries. According to the test results,\* the device's efficiency ranged from 27 to 67%, depending on the voltage, the power drawn from the device, and the condition of insulating tape on one of the parts. (The tape kept burning from sparks generated by the machine, which caused the efficiency to drop and had to be replaced frequently.)

According to John Lyons, director of the bureau's National Engineering Laboratory, the device basically converted direct current to alternating current. He noted that there



**Newman's machine** did not match his claims, federal scientists say.

are several machines already on the market that do the same thing, but they run at 90% efficiency or higher.

Newman had court permission to observe the bureau's tests, but never appeared for any of the experiments, which were conducted between March and June. His spokesman Evan Soule said Newman will ask the court to order the testing of the test equipment. Newman said in an interview, "I have no respect for the National Bureau of Standards. This is a conspiracy against me."

The testing cost the bureau \$75,000, which it hopes to recoup from the patent office. The patent office will submit the results to U.S. District Court for the District of Columbia, which will try the case in December. ■ **MARJORIE SUN**

\*"Report of Tests on Joseph Newman's Device," U.S. Department of Commerce, National Bureau of Standards, NBSIR 866-3405, June 1986.