
Weinberger Backs Biowarfare Lab

Responding to a congressional critic, Secretary of Defense Caspar Weinberger has expressed strong support for a controversial Army plan to build a sophisticated new laboratory for tests involving infectious and lethal biological agents. The laboratory, to be constructed at Dugway Proving Ground in Utah, will incorporate P4, or maximum, government safety standards. It is intended to speed the design and manufacture of equipment needed to defend against an attack with biological weapons.

But the laboratory has itself been attacked by some prominent biological scientists on the grounds that it could potentially be used to develop offensive biological weapons banned by an international treaty (*Science*, 7 December, p. 1176). It has also been attacked because the Army attempted to get appropriations for the laboratory through an obscure legislative provision that effectively barred any formal congressional votes, hearings, or debates.

Noting both these concerns, Senator James Sasser (D-Tenn.), the ranking minority member of the Appropriations subcommittee on military construction, had requested that Weinberger withdraw the proposal and resubmit it next year as a formal budget request, subject to a full congressional debate. Weinberger has now effectively declined. In a letter on 20 November, he said that the laboratory was urgently needed to "develop and field adequate biological and toxin protection," and urged Sasser to withdraw his objection.

Dismissing any possibility that the laboratory could be misused, Weinberger stated emphatically that no work would be performed outside the bounds of the existing international treaty. "We do not engage in any biological or toxin weapons development activities," he said. "The facility at Dugway will not support a biological or toxin weapons program. Its size also does not provide any unique capabilities to investigate general biological and toxin agent properties and characteristics. Further, the chamber will be too small to test weapons."

The letter did not resolve uncertain-

ties about the precise biological agents to be tested in the laboratory. Nor did it shed any additional light on whether the laboratory might be used to produce new toxins (as opposed to toxin *weapons*) or whether it might be used to experiment with genetically modified organisms, areas that many scientists feel the Pentagon should avoid.—R. JEFFREY SMITH

NCI Tightens Security After Bomb Threat

Recent bomb threats from an unknown source have led to tightened security at the laboratories of the National Cancer Institute in Bethesda, Maryland. Robert Weinberg of the Whitehead Institute in Cambridge, Massachusetts, has also been the target of threats. No bombs, however, have actually been found. Concern about violence by militant animal rights groups has heightened considerably after a University of Pennsylvania research laboratory was raided earlier this year.

For the past few months, Weinberg, a leading cancer researcher, has been cited in several letters making threats that were mailed to researchers in the United States and Britain and signed by an unknown group calling itself "Animal Liberation Front." The letters protest Weinberg's alleged use of laboratory animals in his research when, in fact, he uses tissue culture for experiments.

On 28 November, the cancer institute got a phone call from an editor of an Allentown, Pennsylvania, newspaper, who said that the paper had received a letter saying that an institute lab would be bombed to protest Weinberg's research. The letter was again signed by the Animal Liberation Front. Institute officials immediately alerted lab directors to be on the lookout for suspicious-looking packages. The institute's campus security is also patrolling the laboratories with attack dogs.

According to Weinberg, the letters are all apparently postmarked from the same area in Pennsylvania and are all typewritten on the same kind of stationery. In an interview, he played down the significance of the threats as the "reflections of a psychotic." John

Ray Molesworth, an agent with the Federal Bureau of Investigation in Silver Spring, Maryland, a suburb of Washington, said the agency is not vigorously investigating threats against the cancer institute. "We literally get hundreds of bomb threat [cases] and we don't usually do anything unless a bomb is found."

—MARJORIE SUN

Farm Mechanization Suit Enters New Phase

A long-running legal battle over farm mechanization research at the University of California has entered a new phase. Last month, a California county judge redefined and narrowed the issues of the case. Both the university and the group that brought the suit are claiming they scored gains in his preliminary ruling.

In 1979, the California Rural Legal Assistance sued the university, charging that it improperly spent public funds for mechanization research that allegedly benefits only agribusiness. The group also claimed that the university violated federal land-grant law. The case raises broad issues about the social costs of innovation (*Science*, 30 March, p. 1368).

The case finally went to court last spring, but a mistrial was declared shortly thereafter because the judge became ill. Now a new judge has taken over the case and is deciding the legal issues to be tried.

Alameda County judge Ray Marsh raised a new issue by ruling that a university supported with federal land-grant funds must consider the interests of small farmers. The legal question is whether the university, in fact, carried out this obligation. Paul Barnett, a spokesman for the legal assistance group, says this indicates favorable consideration for the small farmer by the court.

Gary Morrison, the university's lead attorney on the case, calls Marsh's ruling "a novel interpretation of federal law." He says Marsh appears to be asking whether the university has a program to evaluate research. "We have an extensive process to do that," he says.

The legal assistance group also charges that federal law prohibits uni-

versity cooperative extension consultants from conducting research. Marsh, however, has not ruled whether this is a legitimate issue.

The case may or may not ultimately go to trial. The legal assistance group has the option of asking the judge to decide the legal issues based on evidence submitted to the court without formal hearing. The group has not yet decided whether it will do so.

—MARJORIE SUN

Lawsuit Seeks a Cap on Fluorocarbon Production

When the Environmental Protection Agency (EPA) in 1977 banned the use of chlorofluorocarbons in aerosols, the action was regarded as a stopgap measure to limit damage to the ozone layer. Now production of chlorofluorocarbons for nonaerosol uses is said to be rising, and the increase threatens to offset the gains achieved by the ban. On 27 November, the Natural Resources Defense Council sued EPA to place a cap on overall production. A few days earlier, by coincidence, a scientific paper was published that the environmental group says bolsters its position.

Chlorofluorocarbons are now primarily used in the United States as coolants in refrigerators and air conditioners, but they are increasingly used as solvents in the manufacture of computer chips. Their emissions could lead to depletion in the ozone layer, which could, in turn, cause climatic changes, and, by allowing more ultraviolet radiation to reach the earth's surface, lead to an increased incidence of skin cancer and damage to crop plants by disrupting photosynthesis.

The Natural Resources Defense Council argues that the Clean Air Act requires EPA to regulate chlorofluorocarbons if they pose a danger to health or the environment. It asserts that EPA acknowledged this danger when the agency in 1980 proposed a limit on production. The proposal has languished during the Reagan Administration, however, and the group thus wants the U.S. District Court in Washington, D.C., to order EPA to issue regulations in 6 months.

Industry has complained that the

United States is being unfairly singled out to solve a global problem. Spokesmen have pointed out, for example, that many other countries even continue to use chlorofluorocarbons as aerosol propellants. But current U.S. production accounts for a large portion of worldwide use. The environmental group asserts that the U.S. should set an example for other countries in limiting production. It notes that after EPA imposed a ban on aerosols, several other countries followed suit.

Alan Miller, a former attorney for the environmental group and now a researcher at the World Resources Institute, says that EPA is "walking a tightrope" on the issue. Although the agency has not sought a production cap, it is currently collaborating with the State Department on an international plan to control, limit, reduce, or ban certain uses of chlorofluorocarbons. The plan, which is still in its early stages of development, is to be presented eventually to the United Nations Environment Program.

The environmental group is hoping that its case will be boosted by a paper published in the 15 November issue of *Nature*. Harvard researchers concluded, based on chemical models of the atmosphere, that if chlorofluorocarbon emissions increase 2 to 3 percent annually, the total ozone density could be reduced by more than 15 percent by the middle of the next century. "This is a very big effect," says Michael Prather, the lead investigator. He and his colleagues assert that when chlorine concentrations in the atmosphere reach a certain point, the rate of ozone depletion speeds up much more rapidly than previously believed.

Whether this depletion will actually occur as the scientists described is uncertain because the science of the stratosphere is extremely complex. Current models for stratospheric chemistry include as many as 200 reactions, for example, and projections thus tend to be controversial. In addition, recent worldwide production rates have been highly variable. In 1982, production dropped about 8 percent, but last year increased 10 percent. Miller, however, argues that "it's better to err on the side of caution and implement regulations so that growth doesn't occur."

—MARJORIE SUN

Comings and Goings

The musical chairs that accompanied the elevation of Senator **Bob Dole** (R-Kan.) to the post of Senate Majority Leader has given the chairmanship of the Senate Committee on Commerce, Science and Transportation to Senator **John Danforth** (R-Mo.). The post became vacant when Senator **Bob Packwood** (R-Ore.) moved to fill Dole's old slot at the head of the Finance Committee. The commerce committee has formal oversight over science and technology policy. Danforth, a lawyer, has taken an interest in higher education and last year sponsored a bill supported by the Association of American Universities that would have provided federal support for university facilities.

The Pentagon's top scientist, **Richard DeLauer**, left the government on 30 November to return to private industry. Before being appointed Undersecretary of Defense for Research and Engineering early in 1981, De-



Richard D. DeLauer

Lauer was head of research at TRW. DeLauer is widely credited with assisting the universities in their successful fight to head off unpalatable restrictions on the communication of the results of basic research supported by the Pentagon.

William Ruckelshaus has resigned as head of the Environmental Protection Agency after an 18-month stint. He said he has accomplished his goal of putting the agency back on course after the buffeting it took under the leadership of Anne Burford. He will be replaced by **Lee M. Thomas**, who, as assistant administrator for solid waste, has been in charge of the superfund program. Thomas was Ruckelshaus's choice for the top job.