American intelligence. Whiffs of radioactive gas picked up by Air Force tracking planes (which is how the first Soviet test was discovered in 1949), as well as by Scandinavian and Japanese sniffing posts, have undoubtedly helped confirm seismic hints of nuclear tests. Moreover, painstaking analysis of isotopes present in the vented gas may have provided clues about the design and performance of Soviet weapons. The AEC, in fact, has censored such information from U.S. government reports of occasional ventings at the Nevada Test Site.

And too, the Golden Rule may have operated here, for the AEC's slate is not entirely clean. Out of 259 publicly announced nuclear tests since August 1963, the AEC has reported that 22 vented "minor levels" of radioactivity beyond the boundaries of the Nevada Test Site. Eighteen were accidental ventings from weapons tests and four were Plowshare cratering experiments expected to cause some fallout. The AEC isn't saying how many of these

Briefing

The White House and the Cancer Board

The presidentially appointed National Cancer Advisory Board has six new members—almost. Although they showed up for the board's most recent meeting and were formally introduced, the President has yet to get around to making their appointments. The situation is a source of some embarrassment to the brass at the National Cancer Institute (NCI), who are supposed to be fighting cancer without red tape.

Feelings about the present lack of presidential responsiveness are compounded by the fact that the White House did care enough about the new appointees to take an active role in their selection in the first place. There are those at NCI who see that as unhealthy political interference.

The new members of the board are William O. Baker, president of the Bell Telephone Laboratories; G. Denman Hammond, director of the cancer center at the University of Southern California School of Medicine, Los Angeles; virologist Werner Henle of the Children's Hospital of Philadelphia; and radiologist William E. Powers of Washington University in St. Louis. Philanthropist Mary Lasker of New York, originally appointed to the board for a 2-year term, was reappointed. So was Joseph H. Ogura, chairman of otolaryngology at Washington University, who was appointed in mid-1972 to fill a vacancy.

According to persons close to the situation, Ogura's reappointment was managed by the White House and could have become the focus of a dispute between the people running the cancer program from Bethesda and those running it from 1600 Pennsylvania Avenue had it not been for Stanford biochemist Paul Berg.

The story, pieced together from various individuals, seems to be this. Ogura, known as an outstanding head and neck surgeon, was not among the persons on NCI's original list of candidates for the six openings simply because of a desire to put new people on the board rather than rename existing members. But word filtered back to NCI that the White House wanted Ogura, allegedly because he has strong Republican connections in the Midwest. It looked for a time as if Hammond, whom many persons were particularly anxious to have on the board, would not be asked to serve. It is not clear just how far the NCI would have pushed its feelings about this matter, but as it turned out, it never had to, because Berg unexpectedly said "No" when he was asked if he would be willing to join the board. This created what amounted to a vacancy.

Berg's decision to reject an opportunity to be on the board was not made as a protest against the cancer program or the Administration but rather as a protest against "administration." Berg, who says his decision not to serve on the board was one that caused him real anguish, realizes that by remaining out of the fray he has lessened his right to criticize the policies others make but in the end his commitment to his research took precedence. Having just resigned the chairmanship of the department of biochemistry in order to spend time in the laboratory, he concluded that it would hardly make sense to take on the time-consuming administrative duties that go with being a board member.

And so, what might have become a minicrisis for the NCI passed.

Ogura, for his part, says that, although he is a Republican, he is not politically active in any way and has no connections with highly placed members of the Administration, least of all, the President. The most likely reason for his reappointment, he suggests, is that having been named to fill a vacancy, he has not had sufficient time to contribute fully to the board's activities.—B.J.C.

Law Sets Study of Biomedical Research

There is going to be a major review of the role of the federal government in biomedical research. This monumental task is to be undertaken by a panel of seven wise persons who will have about a year and a half to complete their labors.

During the last few months, persons in Congress and the Administration have called for a study of biomedical research. Senators Edward Kennedy (D–Mass.) and Jacob Javits (R–N.Y.), for example, wanted to establish a permanent panel on biomedical research that would report directly to the President, as does the three-man Cancer Advisory Panel. They wrote a bill to this effect and attached it to routine legislation to amend the National Cancer Act of 1971 (*Science*, 5 April). Health, Education, and Welfare (HEW) Secretary Caspar Weinberger said that if the bill was not dropped in Senate-House conference on the cancer legislation, he would recommend that the President veto the whole package, and the President indicated he would take Weinberger's advice.

Not long after that, it became known that Weinberger himself had proposed establishing a commission appointed by the President to assess the state of biomedical research in this country, with special emphasis on the government's role in supporting it, but he did not want the commission to be a permanent body (*Science*, 14 June).

releases, if any, sprinkled fallout over the Canadian or Mexican borders, but circumstantial evidence points to two tests and less certainly to a third—all smaller than Soviet releases.

The first such test was the "Pike" shot, a blast rated at less than 20 kilotons and detonated on 13 March 1964. According to a U.S. Public Health Service report* radioactivity began seeping into the air shortly after the test and was followed by a tracking plane southeast into Arizona and California.

Pike delivered the highest gamma ray dose to populated areas in the United States of any accidental release since the Limited Test Ban Treaty went into effect—55 millirems at Cactus Springs, Nevada, or about 10 percent the maximum dose allowed under

* Offsite ventings are monitored by the National Environmental Research Center at Las Vegas, Nevada, now operated by the Environmental Protection Agency. Summaries of data are published monthly by the EPA in *Radiation Data and Reports*.

Briefing

The Secretary's view prevailed in that the biomedical research panel called for in the law will be a temporary one. Anticipating the law, which the President signed on 25 July, the staff at HEW has sent Weinberger recommendations on how the panel might be organized. One of them is a recommendation that there be subpanels to help with the job that may be too overwhelming for seven individuals alone.

HEW staffers have been busy gathering names of persons that they will suggest be appointed to the panel (not more than five of the seven can be scientists) and have passed them on to Weinberger. He will pass them on to the White House where they may or may not be accepted. In any case, the White House is going to get other advice on the matter, and some of it will come from Benno Schmidt, chairman of the cancer panel, who is named in the law to be one of the seven.

—B.J.C.

Score One for Dow

In a move which environmentalists are terming an alarming shift in policy toward industry, the Environmental Protection Agency (EPA) has withdrawn from proceedings to cancel commercial registration of the herbicide 2,4,5-T. The herbicide, made only by the Dow Chemical Company, is sold in the United States for use on rice crops, rangeland, and rights of way. The government in 1970 thought the hazards of the chemical were sufficient to prohibit its use around homes, gardens, and recreational areas. The problem with 2,4,5-T is that it contains a manufacturing impurity, tetrachlorodibenzoparadioxin, or simply dioxin, which is highly teratogenic in mice and considered one of the most toxic substances known.

EPA had embarked on a lengthy, formal, administrative procedure known as a cancellation proceeding to determine whether the remaining uses of 2,4,5-T should also be banned. But on 24 June, in a move which surprised many, EPA Deputy Administrator John Quarles announced that it would be "inappropriate" to keep this administrative procedure rolling along so long as "evidence which would in large part determine the outcome of these proceedings remains scientifically unavailable." He was referring to the fact that new test procedures for finding dioxin in tissue and in the environment in very small portions were more problematic than EPA had anticipated, and that a national monitoring program begun by EPA was also experiencing difficulties.

The decision enraged the Environmental Defense Fund (EDF), which had been a party to the cancellation proceedings. The Washington counsel of EDF, William Butler, said in a blistering letter to Quarles that the decision shows that "EPA is willing to permit continued use of the environment as [the] registrants' laboratory, and the population at large as their unwilling guinea pigs." In EDF's view, "the mere existence of a substantial doubt as to whether a pesticide is injurious to public health is . . . sufficient grounds for . . . cancellation of registrations of the pesticide." More than enough suspicion exists already in the case of 2,4,5-T, environmentalists say.

More fundamentally, the decision, Butler said, portends "an ominous policy shift" by EPA—namely, that "the burden of proving or disproving newly appreciated hazards falls properly upon EPA, rather than upon the registrant, and that, if EPA cannot provide such proof, registrations must be continued."

It is interesting that the decision comes at a time when EPA is under the gun on two other controversial chemicals. The agency is now drafting a review of its 1972 ban on DDT at the request of the Mr. Pesticide who oversees EPA's budget, Representative Jamie Whitten (D–Miss.). And this fall, Shell Oil Company will begin the manufacture of next year's batches of aldrin and dieldrin, pesticides which have been indicated to be carcinogenic in animals. EPA threatened last spring to suspend registration of them, but has kept mum about the threat since.—D.S.

Beagles Not Used for Nerve Vaccines

Beagles are not being used to test vaccines against enemy nerve gas and never have been, says a scientist at Edgewood Arsenal in Maryland. Ludwig Sternberger, head of the immunology program at Edgewood, says that contrary to what an Army information officer told *Science*, the development of nerve gas vaccines is not one of the programs for which beagles are used as test animals (*Science*, 12 July). The only test animals employed in the vaccine research have been rabbits and mice, says Sternberger—"Dogs never entered our mind. . . . I wouldn't let a dog into my laboratory." What's more, he says, the vaccines are not just for fighting men, as was indicated in the article (and by the information officer), but are designed to protect civilians against surprise enemy attack.

Sternberger says he is working with two vaccines against organophosphates (chemicals which interfere with nerve impulse transmission): one gives immunity against the insecticide Paraoxon; the other, still under development, offers partial protection against the nerve agent Soman.—C.H.