of the Bar Association of New York, whose detailed report, together with draft legislation for clarifying and updating the statutes, will be published next month by the Harvard University Press. This article reflects the feelings of that committee, confirmed by talks here in Washington, that the touchiest part of this problem relates to the position of scientists. This concern stems from the feeling that not only are scientists caught with other personnel in a badly outdated system of laws, but that, in the case of scientists, to a dangerous extent the laws have simply been ignored and no effort to comply with them has been made. The reason for this is clear: it is simply that in the area of executive or legal talent there are usually enough men qualified for a position that it is possible to find one who is reasonably free of conflict-of-interest problems; in the area of science the talent and experience the government needs tend to be so specialized that the number of men qualified to fill a post is limited to a very few, all of whom will commonly have quite involved conflict-of-interest problems. But the dilemma does not disappear simply because it is recognized as unavoidable.

There has been no real concern over scientists as a class behaving improperly. Indeed the general feeling seems to be that the scientists have done an admirable job of seeing that their conflicts of interest do not effect their decisions. There is a good deal of concern, on the other hand, over the possible Congressional and public reaction to a scandal in this area. There is a fear that among the several thousand scientists advising the government there must be some who not only have made no effort to clear up a clear conflict-of-interests, but have allowed this conflict to influence their decisions. But aside from the concern over the possibility of outright scandal, there is the feeling that even the appearance of scandal, where no wrong-doing had actually taken place, could have extremely unfortunate repercussions. There is concern over the effect that a sensationalist Congressional investigation could have on such matters as the recruitment of scientists for government service, on the system of contracting with government-supported corporations for work which the government cannot handle effectively within its departments, and on the prestige of scientists in general.

Possible Repercussions

No one knows how much the government, and the nation, would suffer if it were cut off from the services of scientists who were unable to comply strictly with the present conflict-of-interest regulations; or how many scientists would avoid government service if it involved the risk of exposure to scandal mongers, no matter how honorably they served, because of an unavoidable conflicts-of-interest. Nor does anyone know what the effect of a series of scandals, real or imagined, would have on the use of corporate devices like the Air Force supported, nonprofit Rand Corporation, or the Space Technology Labs Inc., which handles a major share of the work on this country's space program. The use of such corporations for work that might normally be done within the government is usually a device for paying higher salaries than the present civil service scale allows, and sometimes for avoiding close control of projects by the Congressional appropriations committees. It is not hard to find Congressmen who are suspicious of the whole business, nor is it hard to imagine the effect on these suspicions of even a hint of scandal.

The question of scientific prestige is a special one, resting on the fact that although the scientist is an increasingly admired person, he is also sufficiently exotic in the public mind that there is a strong tendency to stereotype him. If a lawyer or business executive is caught with his hand in someone else's pocket, no one is led to question the ethics of lawyers or executives as a class. Whether the same will hold for scientists is open to question, particularly in view of the sharp contrast it will present to the current stereotype of the scientist as a man so engrossed with dissecting atoms that he never concerns himself with such gross things as personal advancement and money.

No one knows the answers to these questions, and perhaps the concern of those who fear the worst is unwarranted. But no one seems to feel that even the New York Bar group's proposal for revising the conflict-of-interest statutes, helpful though these proposals undoubtedly would be, is capable of really solving the dilemma of the scientists. It appears to be unavoidable that risks must be run, and under the present circumstances, when the mere mention of the phrase "conflict of interests" suggests to the public not merely a questionable situation but a full-blown scandal, it is understandable that there are a good many nervous people in Washington.

The problem is one that cannot be legislated out of existence. Some sort of rules governing conflicts of interest are necessary, and no matter how carefully they are framed there will still be a great many difficult situations, particularly in the case of scientists. The Bar group's draft legislation hopes to help matters by giving the President broad powers to grant exemptions "in the national interest." But an exemption can only make a conflict of interest allowable; it does not make it disappear. What everyone seems to agree is needed, if and when sensational revelations, justified or not, begin to appear, is a clear understanding among the public and on Capitol Hill that the risk of an occasional scientist acting indiscreetly is trivial compared to the risks to the national security if, in order to strictly enforce the conflict of interest laws, the government were forced to cut itself off from the soundest scientific assistance it can get.

U.S. and U.S.S.R. Begin Exchange Visits of Nuclear Scientists: Polio Group Encounters Difficulties

The U.S. Atomic Energy Commission has announced that the United States and the U.S.S.R. have started an exchange of visiting teams of nuclear scientists. Five U.S. scientists left on 12 May for the U.S.S.R., where they will see high-energy physics establishments; five Soviet experts are coming to the U.S. to visit controlled thermonuclear research installations. These visits implement some provisions of the Memorandum on Cooperation in the Peaceful Uses of Atomic Energy, which was signed last November.

A second exchange is scheduled to begin in June, with a U.S. thermonuclear research team visiting Soviet laboratories and a Soviet team visiting high-energy physics installations in the United States. Other reciprocal exchanges in the area of peaceful uses of atomic energy are also being considered.

The U.S. scientists who are touring Russian establishments are Robert F. Bacher, chairman, division of physics,

mathematics, and astronomy, California Institute to Technology; George A. Kolstad, chief, physics and mathematics branch, U.S. Atomic Energy Commission; Edward J. Lofgren, Lawrence Radiation Laboratory, University of California, Berkeley; Robert E. Marshak, chairman, department of physics and astronomy, University of Rochester; and Robert R. Wilson, director, Laboratory of Nuclear Studies, Cornell University.

The Russian scientists who will tour U.S.-controlled thermonuclear research installations are Boris I. Gavrilov, member, Institute of Atomic Energy; Il'ya F. Kvartskhava, member, Physical-Technical Institute; Yevgeniy V. Piskarev, member, Institute of Atomic Energy; Vladimir T. Tolok, member, Ukrainian Physico-Technical Institute; and Natan A. Yavlinskiy, member, Institute of Atomic Energy.

Poliomyelitis Group Embarrassed

While the cooperative program in nuclear science is proceeding smoothly, an American exchange group concerned with public health has encountered difficulties. A six-member delegation went to Moscow under the United States–Soviet cultural exchange agreement to attend an international symposium on poliomyelitis, 13–16 May. Another international poliomyelitis conference, outside the cultural exchange framework, is now being held (17–21 May). The State Department "requested" the three members of the U.S. team who are federal employees not to attend the second conference because Communist Chinese and East German delegations are participating.

The second meeting is devoted in great part to Soviet experience with a live-virus vaccine developed by Alfred Sabin of Cincinnati. The vaccine is virtually untested in this country, but it has been administered to some 50 million people in the U.S.S.R. Sabin, a nongovernment member of the U.S. delegation, is attending the conference, as is Victor Cabasco of Lederle Laboratories Company and Theodore Boyd of the National Foundation. The three federal employees forbidden to participate are David E. Price, assistant surgeon general of the Public Health Service, Roderick Murray of the National Institutes of Health, and Alexander Langmuir of the Public Health Service Communicable Disease Center in Atlanta, Ga.

First Meteorological Rocket Firing Network Established

Heretofore, meteorologists have been limited by their inability to probe more than the first 100,000 feet of the atmosphere with their radiosonde balloons; now, however, they have the promise of simultaneous and routine rocket observations of the atmosphere to altitudes more than twice as high. The development of this important aid to understanding the weather was revealed in the recent announcement of the beginning of regular meterological rocket-firing periods. A governmental working group has reported details of the unusual system to the Space Science Board of the National Academy of Sciences for transmittal to the international Committee on Space Research (COSPAR).

Rocket Schedule Announced

From 18 January to 19 February 1960, low-cost Loki and Arcas rockets carrying instruments to gather meteorological data in the upper atmosphere were simultaneously fired on a daily basis from Wallops Island, Va., and Point Mugu, Calif. There will be similar monthly firing periods in the spring, summer, and fall of this year. In future launchings meteorological stations at Tonepah, Nev., Eglin Air Force Base, Fla., and Cape Canaveral, Fla., will also participate, forming, with the Virginia and California stations, a meteorological rocket firing network.

The seasonal daily firings will be part of this country's contribution to a series of international Rocket Weeks, which will commence in September 1960. Beginning in 1961, the Weeks will be observed quarterly. It is hoped that other countries will join, during these weeks, in extending this network to other parts of the world. International Rocket Weeks are sponsored by COSPAR; the first was observed from 16 to 22 November 1959.

The present network is a joint undertaking of the Air Force, the Army Signal Corps, the Atomic Energy Commission, the National Aeronautics and Space Administration, the Navy, and the U.S. Weather Bureau. The U.S. Army Signal Missile Support Agency at White Sands, N.M., provided rocket vehicles and launched the initial test rockets.

Firings Make New Data Available

The simultaneous firings from widely separated points afford a means of gathering precise and extensive meteorological data that cannot be obtained by any other existing method. For more than 20 years, weather balloons launched from an increasingly dense network of stations throughout the world have provided wind, pressure, temperature, and humidity data, but their altitude is limited to about 100,000 feet. The rockets employed in the new meterological network reach altitudes of over 40 miles; primarily, they gather data on winds, obtained by radar tracking of the paths of parachutes or clumps of falling "chaff."

It is expected that improvements in the rocket system will lead to routine observations of temperatures and pressures as well as winds. These data, coupled with observations from balloons and meteorological satellites such as Tiros I, will be of great value to meteorologists in helping them achieve more accurate knowledge of the atmosphere. The rocket measurements are of immediate importance for the information they give about the winds that large rockets and space vehicles will encounter during their flight.

These measurements have revealed that winds in the region of the atmosphere which is being explored by the rocket system may exceed 250 miles per hour, and that remarkable changes in this wind velocity sometimes occur. Exactly how these changes affect the weather lower down in the atmosphere is not yet known, but meteorologists will be able to study this problem with the aid of the new data that will become available.

U.S.S.R. Launches Experimental Space Ship

The U.S.S.R. launched a 9988-pound satellite into a nearly circular orbit of the earth on 15 May. The vehicle is described as a "space ship" in the official Soviet announcement, for it carries a pressurized cabin that contains a dummy human figure and equipment for a future manned space flight. On command, the 5510-pound cabin is to be separated from the ship for descent to earth. However, no attempt will be made to retrieve the cabin, which is expected to burn up in the denser layers of the atmosphere.

The satellite circles the earth every 91 minutes at an angle of 65 degrees to the equatorial plane. It is traveling in