corresponds to the Armed Services R&D panel. With this new second edge to his sword, Price is likely to become even more a man to be reckoned with in this increasingly controversial area, where government, industry, and science all have vital interests.

Creation of the new military R&D panel further fragments authority within Congress over research, but it does serve to set up in the House a checkpoint on defense R&D, which until now has received some separate attention only in appropriations hearings.

Price says that his new subcommittee will not begin meeting seriously until after the full Armed Services Committee completes work on major authorization bills—probably in June—and that a period of stocktaking will then be in order. He says that no decision has been made on whether the subcommittee will have technically trained persons on its staff, as JCAE and a few other congressional committees have.

Members of Price's new subcommittee are Democrats Jeffery Cohelan of California, Otis G. Pike of New York, and Samuel S. Stratton of New York, and Republicans Frank J. Becker of New York, Durward G. Hall of Missouri, and Robert T. Stafford of Vermont.—J.W.

Conflict of Interest: New Law Eases Restrictions on Part-Time Expert Consultants to Government

One of the effects of the meshing of government, science, and industry has been to make it more difficult to follow the Biblical injunction against serving two masters. Taking into account the growing numbers of scientists and other experts who serve the government on a part-time basis, President Kennedy, in February 1962, issued a memorandum modifying the injunction to read, in effect, that a man could not serve two masters on the same day, but recognizing that part-time government consultants also had full-time jobs elsewhere. A comprehensive conflict of interest law passed by Congress last October has just been supplemented by a new Presidential memorandum, and taken together, the two go a long way toward salvaging what is sensible, and scrapping what is not, of the old principle.

Comprehensive as it is, the law is not comprehensive enough to include its congressional authors. Congress has always been more sensitive to the ethical shortcomings of the Executive branch than to its own, although several senators and representatives are now pushing energetically for congressional self-regulation as well.

Among the most serious ways in which the old conflict of interest laws were out of date is that they failed to distinguish between different ways of serving the government. The regular government employee, the political appointee, and the occasional consultant were treated alike under the old laws—criminal statutes passed after the Civil War mainly to prevent government employees from prosecuting claims against the government. The employees against whom the laws were initially directed were the mass of low-ranking political beneficiaries of the spoils system that then passed for a civil service. It is, in fact, today's technical descendants of the spoilers—the 1100 or so high-level political appointees who serve for the duration of an administration—who have gotten into the most trouble under the old conflict of interest laws, partly just because they are political appointees. The other categories of government employees—regular civil servants and part-time consultants—have been less troubled. In the case of civil servants the law was clear; in the case of consultants it was too ambiguous to be applied. But their legal liability under the old statutes left consultants at least potentially in jeopardy, and is thought to have discouraged many people from serving the government part-time.

The new legislation strikes a better balance between the government's need for ethical integrity and its need for expert advice. The growing body of scientific and technical personnel who serve as advisors and consultants while maintaining jobs in universities or industries are now defined as "special government employees," provided they work for the government no more than 130 out of 365 days. The law's main effect is to liberate the part-time employee from the potential application of an irrelevant series of laws he may inadvertently have been violating in the past; it does not affect the actual relationship between the government and its advisors except by lessening the danger of political attack, and thus making them safer. Although the new law is thus a good deal less remote from current practice than the old ones, in focusing on the advisor relationship it leaves some of the even more complex forms of the science-industry-government tangle untouched. All the provisions of the law, in other words, are relevant to certain current practices, but there are other practices that are not covered by them.

The specific provisions of the law codify what has been administrative practice in many agencies for several years. The key requirements are: (i) a consultant may not act for a private interest in negotiating a grant or contract with any government agency if he has "personally and substantially" participated in government policy making with regard to that particular contract or grant; (ii) a consultant may not negotiate a grant or contract on any subject with an agency he has served more than 60 days out of a 365-day period; (iii) although the consultant may not act as a negotiator in the above cases, a waiver may be obtained permitting him to work on the performance of such a grant or contract, if the director of the agency thinks that the national interest so requires; and (iv) a consultant must disqualify himself from advising the government on any subject that is likely to have a direct, predictable (and substantial) effect on the financial interest of himself, his spouse, or his minor child.

On most other questions, such as post-employment activities, the consultant is affected much the same way that the regular employee is, although the advisory nature of his job is likely to mitigate the general restrictions to a certain extent. The penalties for most of the violations specified are a $10,000 fine, or 2 years' imprisonment, or both. Agencies using consultants have been directed to send explanatory material to them.

The new law, like the old, encourages a narrowly pecuniary view of conflict of interest, not because greater subtleties are not recognized but because they are impossible to regulate. The case of the Eisenhower cabinet officer who signed a hotel register as the representative of a private firm in which he previously held large holdings illustrates the limits of the financial angle. The case of the present Deputy Secretary of Defense, Roswell Gilpatric, who is currently under Senate scrutiny because of the remote possible link between the controversial TFX award to General Dynamics and the fact that General Dynamics is a client of the New York law firm to which Gilpatric is soon returning, illustrates how pervasive and thorough the

financial interpretation of conflict of interest has become.

Although strong on ethical appearances, the new law will not affect what is becoming one of the most critical problems of the government's technical advisory apparatus. The difficult case is no longer one where an official's judgment is colored by an opportunity for private financial gain through the award of a particular contract to a particular firm—although that is still a problem. More subtle problems of judgment arise which are in no way, or scarcely, affected by an advisor's opportunity for profit. The award of a research contract to a university chemistry department is not likely to bring a particular professor a great fortune. But it is likely to reflect on him both directly—in the sense that he may become the hero who brought the bacon home to his department—and indirectly, in the sense that it enhances the prestige of his department, attracts graduate students, may lead to the purchase of costly equipment, and so on.

Disqualification procedures included in the new law cover just this sort of situation; in this respect the law more or less ratifies what has been standard practice in the National Institutes of Health and the National Science Foundation for several years. The solution in these institutions has been to adopt the childlike procedure of "leaving the room" when a grant to the advisor's home institution is being discussed. There is thus no bodily conflict of interest, but it is unlikely that such an environment will remain entirely free of "horse-trading" tendencies, or that judgment will be completely free, when one judge is lurking behind the door one moment, another the next.

The limited size of the manpower pool from which government must lure advisors in a number of fields poses an additional hazard of orthodoxy or circularity in the advisory system, although it is not strictly a conflict of interest problem. When most of the handful of seismologists are already working for the government on methods of identifying underground nuclear explosions, it is difficult for the government to get an independent evaluation of their work.

The shadow of conflicting interest falls also on the legally inscrutable relationships between the government and the nonprofit corporations that supply it with scientific and technical talent it would have difficulty attracting on its own. The Institute for Defense Analysis, for example, maintains in the Pentagon, a section of its operations called the Weapons Systems Evaluation Division. WSED parallels the Weapons Systems Evaluation Group (WSEG) of the Pentagon itself, and is, in effect, the technical staff of the Joint Chiefs on WSEG matters. Since the WSED staff is employed by the Institute, not by the government, its members are freed from certain government restrictions, mainly on salaries. Until last year, an Institute employee actually held the Pentagon title of Director of Research for WSEG, though he served without compensation in that capacity. A similar relationship existed until a few years ago between the Pentagon's Advanced Research Projects Agency and IDA's Advanced Research Projects Division. Like the Rand Corporation, which was established by the Air Force, IDA and several other nonprofit organizations exist solely or almost exclusively to service the government; they would have little or no life without it. The government, in turn, is dependent on them.

If some of the new science-government relationships appear ethically ambiguous when judged by the traditional concept of conflicting interest, that is more because the concepts have not caught up with change than because the relationships are in any way sinister. No more effective ways have yet been invented for the government to receive the maximum amount of top-level advice in the maximum possible number of instances. The novel forms of the conflict of interest problem now apparent, grow in part out of the state of science, in part from the needs of government. They will not be affected by the new laws.—ELINOR LANGER

Announcements

New York Medical College has established a graduate school of **medical sciences**, headed by Warner F. Bowers, professor of clinical surgery at the college. The school's program will lead to the M.S., Ph.D., and D.Sc. degrees.

Harvard University's school of public health has announced plans for a center for **population studies** as an expansion of its recently formed department of demography and human ecology. The center seeks to attract specialists in biological, physical, and social sciences who have not previously worked on population studies. They will join experts in the field who are already at Harvard. Funds are on hand for an endowed professorship to head the center, and an additional $2.4 million is being sought for endowments and construction of facilities.

The center will specialize on the effects of public measures on quality and density of population and on efforts by governments and local groups to regulate population growth. John C. Snyder, dean of the university's faculty of public health, will act as head of the department until a director for the center is appointed.

The U.S. Coast and Geodetic Survey has established a **seismological data and analysis center** in Washington. Information on earthquakes and other seismic disturbances will be sent to the center from 125 recording stations in approximately 60 countries. The seismograms will be stored on 70-mm film clips from which full-sized reproductions can be made on request; the information is unclassified. The director of the center is Thomas Modgling. For further information write to the Director, U.S. Coast and Geodetic Survey, Washington 25, D.C. Attn: Seismological Data Center.

Courses

Two courses in **electron microscopy** will be offered simultaneously at the University of California, Berkeley, 8–19 July. One course, on biological materials, is designed primarily for senior investigators, post-doctoral fellows, advanced graduate students, and professional technicians. Participants may conduct individual projects during the course. The other course, on inorganic materials, is intended for university instructors, advanced graduate students and industrial technicians concerned with the physics of solid-state metallurgy. Persons registered may attend lectures in both courses.

Advance registration is required; the $250 fee includes all class and laboratory materials. Deadline for applications: *14 June*. (Engineering and Sciences Extension, Univ. of California, Berkeley 4)

A program in **laboratory animal medicine** has been established at the University of Michigan Medical School. Both pre- and postdoctoral training is offered. Postdoctoral training period is 2 years. Veterinarians accepted for the