Senate Tunes Up Committee System

The Senate's effort to reform its committee system culminated on 4 February in the adoption of a compromise which modestly reduces the number of committees and introduces a variety of efficiency measures. A net effect of the changes is to put science, energy, and environment matters into sharper focus in the Senate.

The Aeronautical and Space Sciences Committee was one of three standing committees abolished—"consolidated" was the word used—as part of the final compromise. The Post Office and Civil Service Affairs Committee and the District of Columbia Committee were the two standing committees, whose functions were taken over by other committees; four select committees and joint committees were also consolidated.

The Aeronautical and Space Sciences Committee was established in 1958 to oversee the nascent space program. It shared jurisdiction over science policy matters with the Commerce and Labor and Public Welfare committees. Jurisdiction over space activities was transferred to the Commerce Committee, which has been transformed into the Commerce, Science and Technology Committee chaired by Senator Warren G. Magnuson (D–Wash.).

Legislative authority over the National Science Foundation will remain in the new Human Resources Committee, which is the consolidated form of the old Labor and Public Welfare Committee. Senator Edward M. Kennedy (D–Mass.) will continue to head subcommittees responsible for both biomedical research and the National Science Foundation. Senator Harrison A. Williams (D–N.J.) is chairman of the full committee.

The major impact of reorganization will be in energy matters. As it has in the House, the demise of the Joint Committee on Atomic Energy has brought a redistribution of authority over nuclear energy in the Senate.

Jurisdiction over both fossil-fuel and nuclear energy is concentrated in the new Committee on Energy and Natural Resources, the new incarnation of the Interior Committee. Chairman of the new committee is Henry M. Jackson (D–Wash.), who, as one Senate staff member said, now has "a hammerlock on energy in the Senate."

Responsibility for legislation on the regulation of nuclear energy, however, was given to the new Committee on Environment and Public Works. This is the consolidated form of the former Public Works Committee. The chairman is Jennings Randolph (D–W.Va.).

Military applications of nuclear energy go to the Armed Services Committee and responsibility for the foreign policy implications remains with the Foreign Relations Committee.

Although the major new committees have not formally reorganized since the final action on the committee system because of a recess, it appears that the major players in science, energy, and environment matters in the Senate remain the same and, if anything, have gained influence.

The Select Committee to Study the Senate Committee System, chaired by Senator Adlai E. Stevenson (D–Ill.), proposed a reduction of Senate committees and joint committees of from 31 to 15. The Senate voted finally to reduce the number of committees to 25 with a proviso that at the end of the year three more panels may be dropped—the Nutrition, Joint Printing, and Joint Library committees.

The unwillingness of the senators to make larger reduction in the number of committees came as something of a disappointment to reformers but hardly a surprise. Stevenson's committee had been aware of the practical difficulties in making cuts requiring senators to lose chairmanships and control of staff and had avoided making proposals impinging on Senate power centers such as the Finance Committee.

Efforts to modify the Senate seniority system were turned back as discussion of the reorganization progressed. But the compromise measure does promise to increase efficiency in the way the Senate does business by reducing the number of committees and subcommittees on which a senator may serve, and by providing for a computerized scheduling system to reduce the conflicts which often turn the senatorial day into a frustrating round of committee hopping.—J.W.

chemicals, was thinking about expanding into biological areas without necessarily opening a pharmaceutical division. As he described it, "We've been looking for large world problems we could solve with our skill base," but, when the company thought about establishing a major biological research branch of its own, it discovered that "biochemistry is the province of the universities, and not many biochemists were interested in coming to industry. We realized we couldn't build a biology department by hiring people away from the medical schools, so we thought about collaborating."

Here, Bert Vallee of Harvard's Peter Bent Brigham Hospital enters the picture. Vallee, 57 years old, has had a long and distinguished career studying the relationship between trace elements, often found in only minute quantities in biological tissue, and disease. Elected to the National Academy of Sciences in 1974, he has a solid reputation as a biochemist and is said to be very good at characterizing substances that are difficult to identify. For years, Vallee has been a corporate consultant to Monsanto, and so, as Throdahl noted for *Science*, it was natural that the company should discuss its interest in biology with him. Thus, the Harvard-Monsanto connection was made. For introductions, Vallee was the key. Judah Folkman's theories, and Monsanto's willingness to gamble on them, were the key to putting the deal together.

The Science

Moses Judah Folkman, who for some reason is always described as the son of a rabbi and the youngest man ever appointed a full professor of surgery at Harvard (he was 34 years old at the time of his appointment in 1967), is surgeon-in-chief of Harvard's Childrens' Hospital Medical Center. Several years ago, Folkman began working the idea—known but unexploited for 100 years—that solid tumors (as contrasted with malignancies of the blood or lymph systems, for example), cannot grow unless they are vascularized. Folkman postulated the existence of a chemical signal, TAF, that tumors send out to stimulate the growth of new blood vessels. Among his most dramatic experiments to demonstrate TAF's existence are ones in which a tumor is surgically implanted in the cornea of a rabbit, where there are no blood vessels. Within a week or so, tiny capillaries from the nearby iris begin to penetrate the cornea, heading for the tumor implant. Once the blood vessels reach it, the tumor grows rapidly, becoming as large as the eye itself within 4 weeks.