News and Comment

Congress and Science: Daddario Study Casts Doubts on Proposals To Establish Advisory Service

During the past few years, various proposals have been made for establishing some sort of formal scientific advisory service for Congress. But since Congress rarely moves quickly on matters affecting its own ways, and since the leadership of the scientific community has been wary about getting mixed up in the intricacies of congressional politics, the proposals have never attracted substantial support. Earlier this month, whatever chance they had for developing such support was considerably reduced with the issuance of a staff study* by Rep. Emilio Q. Daddario's subcommittee on Science, Research, and Development, which was established last year by the House Science and Astronautics Committee to study federal relationships with research and development activities. The report, of course, is the work of a committee staff that is trying to carve a larger role for itself in congressional dealings with science. But even if a bit of self-serving analysis is detectable, the study nevertheless does an effective demolition job on the contention that undesirable results can be attributed to the lack of scientific advisers in residence on Capitol Hill.

The development of proposals for improving Congress' scientific understanding coincided with the burgeoning of federal expenditures for R&D and with a number of instances in which Congress intervened in matters of research administration—such as when the subcommittee chaired by Representative L. H. Fountain pressured the National Institutes of Health into tightening its accountability procedures. It was then noted by various concerned members of the scientific community, as well as some members of Congress, that Congress contains

* Scientific-Technical Advice for Congress---Needs and Sources, 86 pp., available without charge from the Committee on Science and Astronautics, U.S. House of Representatives, Washington, D.C.

not one scientist and that scientifically trained persons are a rarity on congressional staffs. And from this observation, there followed the conclusion that if congressional-scientific relations are less than harmonious, the cause can, at least in part, be attributed to congressional ignorance of science. Proposals followed, including one by Senator E. L. Bartlett (D-Alaska) to establish a Congressional Office of Science and Technology, which would advise the members and committees on matters involving science and technology. There was also a proposal by R. A. Carpenter, a Washington industrial representative, calling for a Legislative Scientific Service with 100 professional and 200 supporting staff members. And, another proposal, by Rep. Abner W. Sibal (R-Conn.), called for each house to appoint a chemist, a biologist, and a physicist to serve as science advisers.

The Daddario staff study was clearly sympathetic to the goal shared by these proposals—the improvement of Congress' understanding of scientific matters; but, upon examination of the workaday affairs of Congress it found that Congress almost never has occasion to concern itself with purely scientific matters, and that when it does, it has easy access to a variety of capable people working in the field under consideration.

As Daddario's staff found, on the basis of its own experience and in discussing the matter with other committee staffs, there are few instances in which the legislative branch has to cope with "purely technical questions." Upon analyzing the sorts of inquiries that Members of Congress make on matters related to science and technology, the study found that:

The preponderance of these questions might be more properly termed "scientific and technical management questions," for they revolve about such matters as funding, schedules, manpower, program objectives, and duplication of effort. Answers to questions of this kind require detailed knowledge of the programs within the government, and cannot be answered by dissertations on the purely scientific or technical aspects of the matter.

Many of the congressional committee staffs . . . liken Congress to a board of directors of a very large company which passes upon the programs, funding, and policy matters submitted by the operating divisions. . . . If the business analogy is appropriate, then the high degree of scientific and technical capability required to formulate, evaluate, and direct long-range programs is not required in the Congress. Rather, the degree of technical competence desired is that which is sufficient to recognize the particular areas which need close examination in the traditional processes of the hearings.

The staff study also found that if Congress is short of scientific advice, it is not because of a lack of institutions that can provide assistance. Federal agencies reported to the committee that Capitol Hill's requests for scientific and technical information are infrequent. This might be attributed to the legislative branch's reluctance to seek the advice of the very agencies that it supposedly oversees, but on nonscientific and nontechnical matters members of Congress show no hesitation in requesting information and guidance from the well-staffed executive agencies. Industrial organizations also indicated that congressional requests on science and technology are scarce, and professional scientific societies reported the same experience. (In regard to whether the societies might jeopardize their tax-exempt status by providing advice for Congress, the committee concluded that it is safe "when the first step is specifically taken by the Congress but that the attitude of such organizations not to offer unsolicited information to the Congress cannot be considered imprudent." Since congressional committees often extend a blanket invitation for interested parties to comment on pending legislation, it would seem that scientific societies can easily get their views to Capitol Hill on matters that concern them.)

On the question of what should be done to improve Congress' handling of scientific and technical matters, the staff study came out for refining and strengthening the existing arrangements. The Congress, it noted, will have to "deal increasingly with issues affected by science and technology." Congressional committees, it recommended, should make use of *ad hoc* groups of scientists and technicians "as consultants during the lifetime of the particular matter to be handled." (It should be noted that Congress is already doing this to a surprisingly large extent. Daddario's subcommittee has a seven-member research management advisory panel and is working out arrangements for the National Academy of Sciences to provide advice on specific problems. On a longterm basis, the House Science and Astronautics Committee has a 15member advisory panel that periodically meets with the committee to think aloud and to provide advice on problems of science and government, and the House Select Committee on Government Research, chaired by Rep. Carl Elliott (D-Ala.), has established eight separate advisory panels, comprising 85 persons, to advise on a wide range of issues.)

The Daddario staff study also suggested that Congress could find valuable sources of assistance in the National Academy of Sciences and the newly established National Academy of Engineering, and also through strengthening of the Legislative Reference Service, which, under the Library of Congress, provides research service for the Congress. But on the subject of bringing more scientists into committee staff positions, it cautioned that while persons with "technical backgrounds" were valuable, it was advisable to bear in mind "the desirability that such personnel be familiar with the workings of government and the Congress, and . . . that the bulk of staff work, even for technically oriented committees, requires more application of the social and political sciences than the purely physical ones."

Finally, on the question of whether Congress would like scientists in its ranks, and whether scientists would like to be in the ranks of Congress, the staff report offered these observations:

Aside from the fact that most top-level scientists and engineers wish to pursue psychologically and financially rewarding careers in their chosen fields, they would not be qualified to work on the (Capitol Hill) if they could not translate specialized subjects into language understandable to laymen and also be able to write reports. The science administrators in government, universities, and industry have these extra qualifications of being able to express opinions by speaking and writing, but they can get much more personal satisfaction and public recognition by working in the places where they are now employed than by accepting anonymous staff positions in Congress.

-D. S. GREENBERG

Battelle: New Contractor's Role at AEC Lab Means Diversification for Hanford, Growth for Institute

By becoming the new operating contractor of the Atomic Energy Commission's Hanford Laboratories at Richland, Washington, Battelle Memorial Institute has taken a giant step down the road of expansion and diversification.

Battelle, a nonprofit research and development organization based in Columbus, Ohio, will administer only the research part of the billion-dollar government atomic energy complex on the Columbia River in southeastern Washington. The laboratory facilities represent a federal investment estimated at \$85 million. Industrial contractors will continue to operate the plutonium reactors and chemical processing facilities at the Hanford works.

However the General Electric Company, which has been contractor for the whole Hanford operation for 17 years, will relinquish management of the production as well as the research phases of the Hanford operation as soon as the AEC has found a successor—or, more likely, successors—to GE.

Power from Hanford

General Electric will stay on for a longer period to oversee bringing of the so-called New Production Reactor (NPR) at Hanford into full service. The NPR is designed to produce plutonium but has features that will allow it to be linked to an electricity generating plant which will use the reactor's byproduct heat energy. After a long congressional fight, a Hanford steam generator plant was authorized during the Kennedy administration. Both public and private power companies in the Northwest are participating in the project. The plant is expected to be capable of producing 800,000 kilowatts when it is completed late next year.

Battelle will not take over direction of the laboratories from GE until the beginning of the year. Negotiations between the AEC and Battelle on terms of the operating contract are still in progress. The negotiations are based on the Battelle proposal which in May won the nonprofit research organization its selection as contractor. Battelle will operate the labs on a cost-plus-fixed-fee contract, with an estimated annual level of operations, at the outset at least, of \$25 million.

General Electric's disengagement at

Hanford comes at a time when the government, finding itself with an embarrassment of enriched uranium and plutonium, has ordered the shutdown of four of AEC's 14 plutonium reactors. Three of Hanford's eight reactors will be shut down. Savings from these shutdowns, plus cutbacks in production of enriched uranium at three gaseous diffusion plants, are supposed to amount to \$50 million in the current fiscal year and to \$70 million in fiscal 1966.

The cutbacks will result in layoffs for about 2000 of the more than 8000 workers at Hanford. The major impact of the reduction in employment will not be felt, however, until early 1965, when the reactors are actually shut down.

Looming unemployment has stimulated rather strenuous efforts in recent months to change what, since the vast Hanford works went up in the desert during World War II, has been essentially a single-employer economy in the so-called tri-city area (Richland, Pasco, and Kennewick). A citizens' committee has been regaling industrial prospects with accounts of an available abundance of technical manpower and cheap power. And Senator Henry M. Jackson (D-Wash.), an influential member of the Joint Committee on Atomic Energy and the Senate Armed Services Committee, has been aiding the cause.

As it now stands, a major fissionproducts-recovery and isotope-packaging operation will be established at Hanford, where there is a large supply of fission-products wastes now going largely and literally to waste. The AEC hopes that private industry will take over the job, but in case private capital is not available, the AEC has earmarked \$9 million for the project. The AEC is also inviting proposals from contractors to handle radiation protection services at the works, and it is hoped that new radiation environmental safety laboratory may be established on this foundation of radiation health protection services. Early this week the AEC announced that a proposal submitted by the United States Testing Company, Inc., of Hoboken, N.J., had been selected as a basis for negotiations on a contract to manage and operate radiation protection services.

The AEC has had a policy of encouraging economic expansion in the areas of its plants and labs and, within the past couple of years, has had diversification studies for its major installations carried out. This, and pres-