to provide buildings, a dean or director, and potential teachers. UNESCO provides the necessary equipment, and experts to develop an engineering curriculum suited to local requirements and to get instruction under way. Fellowships abroad for prospective teachers are part of the UNESCO program. The project is expected to be self-supporting and self-sustaining after 5 years.

In addition to university teaching departments, the applications department also underwrites programs to establish national centers in fields, such as instrumentation and metrology, which are viewed as necessary to the modernization process.

With limited funds available it might be assumed that the demand for assistance would be overwhelming and that choosing projects would be a perplexing task. In fact, the matter of a country's ability to accept assistance is given such careful attention that the number both of applications and of approvals seems to be kept reasonably well within the bounds of the 40 to 45 projects likely to be running at any time.

While the UNESCO secretariat supervises administration, the projects are staffed by "experts" who are under contract to UNESCO but are not UNESCO employees in the sense that the "permanent" members of the secretariat are. Posts in specific projects are advertised, and experts are chosen from among nominees put forward by member nations or selected from a roster of applicants maintained at UNESCO headquarters. Project teams are, in almost every case, multinational.

Recruiting for international organizations like UNESCO and their projects holds special piquancy for the United States. While the U.S. provides about a third of the total funds expended by UNESCO, participation, in terms of Americans actually involved in UNESCO activities, is relatively small. In the sciences and engineering, the phenomenon is especially pronounced.

UNESCO recruiting procedures are cumbersome, and this discourages some people. The very large American aid program of course competes to a considerable extent for the same talent. Recruiting is a formal responsibility of the State Department's Office of International Organization Affairs. The State Department has set up a special recruiting section in the office and is in the process of increasing its efforts, but State's contacts with the scientific community are far from perfect, as its difficulties with its own science-advisory and scientific-liaison apparatus demonstrate. And no other official or quasi-official body has shown much sustained interest in the problem. There are some bright spots. For example, a significant number of Americans involved in the curriculum reform movement at home have shown a readiness to carry on the work abroad. But in most other categories requiring people with scientific or advanced technical training, American candidates are scarce. Much of the effective recruiting of Americans for international organizations has been done informally by the relatively few scientists personally concerned with international affairs, in many cases by people already in the field, looking for colleagues or successors. What cannot be ignored, of course, is the fact that the United States probably offers scientists and engineers more in the way of both material incentives and professional opportunities at home than any other country.

Many Americans point out the contrasting pattern of Soviet placements in international scientific jobs. The scientists appointed from the U.S.S.R. are generally very competent and, at the end of their terms of service, usually return to posts more desirable than those they left.

This may be the key point. UNESCO jobs, both at headquarters and in the field, typically demand university research and teaching experience. While American universities are avowedly interested in development, absence of regular faculty from the campus for more than a sabbatical year or, at most, a 2-year leave of absence is frowned on and in many places proscribed. In the case of the scientist, the problem is compounded, since absence from his laboratory for a long period is presumptive evidence to his colleagues that he has drifted out of the scientific mainstream. Certainly a scientist who spent 5 years seeing a development project through in the field would face very serious reentry problems.

Recruiting of Americans for secretariat appointments is not so difficult as finding good men for work in the field. The jobs in headquarters are reasonably well paid, UNESCO has a handsome new building, semidiplomatic status is an attractive fringe benefit, Paris is a pleasant place, and the work is generally interesting and challenging. After a term of 2 or 3 years the man can usually return to the United States without serious harm to his career. On the other hand, the experts' jobs in the field are not highly paid, by American standards; they are likely to be extremely demanding, particularly in terms of adjustment in living and working conditions; and the effect on career is likely to be negative. The result of all this is suggested by one reliable estimate that there are now fewer technically trained Americans working on UNESCO projects in the field than New Zealanders.—JOHN WALSH

Science and Technology: House Subcommittee Offers Capitol Ideas

Critics of congressional structure often dwell on the fragmentation and overlapping of legislative jurisdictions among the large number of House and Senate committees and subcommittees. One of the areas where jurisdiction is greatly splintered is science and technology: perhaps a score of committees legislate and appropriate money with little regard for each other's activities.

Two suggestions for innovations in the congressional approach to science and technology were recently offered by the House Subcommittee on Science, Research, and Development, of which Rep. Emilio Q. Daddario (D–Conn.) is chairman.* The first suggestion deals with the problems of coordinating the efforts of many congressional committees without losing the benefits of diversity; the second is concerned with the problem of identifying dangerous side effects of new technology.

To enable committees to get a general view of a problem, the subcommittee suggests the creation of informal, *ad hoc* science and technology study groups consisting of appropriate House committee chairmen who would meet, either before any hearings were

*"Second Progress Report to the Committee on Science and Astronautics," available free of charge from that committee, U.S. House of Representatives.

held or, at least, before a specific piece of legislation reached the House floor. The membership of these *ad hoc* groups would change with changing problems. On matters concerning transportation, for example, representatives of the committee on Science and Astronautics would meet with representatives from the committees on Commerce, Foreign Affairs, Government Operations, Merchant Marine and Fisheries, Public Works, and Appropriations.

As Daddario sees it, the meetings of the study groups might be initiated either when the administration presents a program to Congress, or when an individual committee chairman sees a major problem. The group members would survey the problem, decide who should handle what aspects of it, and subsequently keep each other informed of the progress in their respective committees. Hopefully, this scheme would avoid some duplication and combine the advantages of bargaining and expert advice with a degree of integration by giving committees an overall view of things.

A different solution to the problem of fragmentation of committee responsibility on scientific and technological matters was offered by the Joint Committee on the Organization of Congress, which was formed in 1965 to investigate reforms needed in the structure of Congress. This group recommended that jurisdiction on questions of science policy be rearranged and consolidated into fewer committees (*Science*, 16 Sept.). Much opposition came from committee chairmen who resent possible diminution of their influence.

An informal group, such as Daddario's subcommittee suggests, would be less likely to encounter such opposition. But a good look at Congress shows that informality has its own headaches. Committee chairmen already have a more than full schedule: why be a delegate to an informal discussion group when a lot of informal discussion goes on anyway? Furthermore, an informal leadership, dependent on which chairman initiated the meeting or which committee handled the heaviest load of the problem, might mean that no leadership will be taken. How to go about staffing an informal group also presents problems—and little gets done without a staff.

The value of such study groups would ultimately rest on the cooperation of the committee chairmen—a cooperation that can be inconsistent and unpredictable. At any rate, the study group is still a fuzzy idea, offered by the subcommittee to generate interest and discussion, and awaiting suggestions.

The second suggestion of the subcommittee deals with efforts to foresee and forestall the undesirable side effects created by technological innovations, side effects such as the toxic byproducts of atomic energy or the pollution of the soil resulting from the use of pesticides. Says Daddario, ". . . We need an early warning system to apprise us of the potential dangers of certain technologies if they are applied without restraint."

Here, too, the recommendation of the subcommittee is still vague, but the members suggest the establishment of a "technology assessment board" which would identify the possible dangerous side effects, as well as the benefits of new technology, so that we do not "blindly adapt technology to our needs." This board, they suggest, might consist of a small group of scientists and congressmen concerned with scientific matters, plus an advisory council representing science, industry, and the public. The subcommittee report emphasized that it does not see the board as having regulatory or "cease and desist" authority, but that it would act only as an "early warning" system.

One likely objection to such a board is that the decision whether the side effects of new technology are "dangerous" or "undesirable" is often a hazy and controversial philosophical-social question rather than a political or scientific one. But a board that would inform the public of the possible directions technology can take and is taking might be valuable.

The problems to which Daddario is addressing himself have been targets for a wide variety of suggestions. Daddario does not expect swift action on his proposals, but he would like to stimulate discussion as a step toward action.—NAOMI PANUSH

Amendments to AAAS Constitution

The Committee on Council Affairs and the Board of Directors recommend that Article IV, Section 2, of the Association's constitution be amended by inserting "the vice presidents-elect" in the list of members of Council, and that Article VI, Section 3, be amended by inserting "the chairman-elect, if there be one" in the list of members of a section committee.

The constitution specifies: "Proposed amendments shall be published officially in substance at least one month prior to an annual meeting of the Association. A proposed amendment that is approved by the Board of Directors shall require for its adoption a favorable vote of two-thirds of the Council members present in a Council session of that meeting."

Council will vote on these amendments at the annual meeting in Washington, D.C., on 30 December 1966.

Announcements

Terre des Hommes, an international organization which is providing medical help for children in Vietnam needs volunteers to work in the only children's hospital in Saigon. The organization is running the acute care unit in Nhi Dong Hospital and needs **pediatricians, nurses, and support personnel** to make the unit a 24-hour-a-day operation, to relieve the current staff, and to serve in provincial hospitals. The minimum service period for physicians is 6 months. Volunteers will be accepted from any country and will receive a modest stipend; they may not engage in political activities during their service.

Terre des Hommes also needs donations of drugs and equipment for Nhi Dong and the provincial hospitals, and planes to take children to Europe (or elsewhere) for treatment they cannot get in Saigon. More information is available from Terre des Hommes, 26 Beau Sejour, Lausanne, Switzerland.

Recent Deaths

J. William Buchta, 71; retired physics professor at the University of Minnesota; 23 October.

Peter J. W. Debye, 82; professor emeritus of chemistry at Cornell University and winner, in 1936, of the Nobel prize in chemistry; 2 November.

Warren J. Gross, 50; professor of zoology at the University of California, Riverside; 17 October.

Allan R. Holmberg, 56; director of the Cornell Peru project and formerly chairman of Cornell's department of anthropology; 13 October.

Henry Bearden Mulholland, 74; professor emeritus of internal medicine at the University of Virginia; 30 October.