lot of problems before it can hope to exercise any significant influence on public opinion and policy, the organization set itself on a promising path by its conduct of its latest meeting.

SOS was founded by a group of New York psychiatrists who felt that it would be useful to bring together members of various scientific disciplines to form a "science of survival." The original group is still associated with the organization, but the leadership has passed to a national council headed by Hudson Hoagland, president of the American Academy of Arts and Sciences and executive director of the Worcester Foundation for Experimental Biology; Stuart W. Cook, head of the New York University psychology department; and Gerald Wendt, chemist, educator and editor of the *Humanist*. The only holdover among the officers is Ruth Lassoff, executive secretary of the Association for Applied Psychoanalysis, who continues as treasurer.

The change in leadership was accompanied by a decision to make professional standing a qualification for participation in the second congress and to rule out any attempt to produce resolutions. The general public was not invited, although anyone willing to pay the registration fee of $7.50 was welcome to attend. However, one nonscientist "peace movement" activist who raised a considerable stir at last year's meeting was told this time that no one would feel hurt if he didn't show up.

The result of this new approach was a weekend of serious discussion among some 500 persons, most of them scientists and university faculty members. (Attendance last year was about 700.) The benefits of such a session are difficult to assess, since it is impossible to keep a scorecard on the exchange of ideas, but many of the participants came away with the feeling that their time had been well spent on a variety of subjects, including "Political barriers to disarmament in the area of international politics," "Tension reduction through international cooperative ventures," "Partial steps toward disarmament," "Methods of inspection: Long-range problems of inspection for disarmament," and "The economics of industrial conversion." In appraising the usefulness of the congress, perhaps the most perceptive remark was made by Harold Taylor, former president of Sarah Lawrence College, who said, "it has been very illuminating, but I am a little concerned about the lack of moral enthusiasm"; by this he apparently meant that the fervor usually associated with the "peace movement" was nowhere in evidence. It was all as calm as a dentists' convention.

Last year's congress concluded with a business meeting that erupted into the row over resolutions. This time there were no business meetings, no resolutions. It was announced that Tom Stonier, of the Rockefeller Institute, would replace Cook, who is joining the University of Colorado, and that sometime within the next 6 weeks the leaders of SOS would meet to plan the organization's future. Just what that will be is uncertain at this point, although the prospects appear to be hopeful, if unspectacular. The turnout at both the first and the second congresses demonstrates that there are many capable scientists and educators who are eager to have their professional capabilities enlisted part-time in the cause of reducing the likelihood of war.

Harnessing those capabilities in an organization like SOS is, however, a difficult matter. A number of "peace-oriented" full-time organizations, such as the Peace Research Institute, are now in existence, while various long-standing part-time organizations, such as the Federation of American Scientists, have carved out a place for themselves as scientific spokesmen in the promotion of peace. The hopeful element, though, is that there is plenty of room for good work, and that if SOS should start producing it, people will listen.

—D.S.G.

Cox Resignation from AIBS Post Announced by Governing Board

The governing board of the American Institute of Biological Sciences has announced that Hiden T. Cox has resigned from the organization, effective 31 August.

Cox was executive director of AIBS from 1955 until last January, when he was appointed long-range planning officer. He said this week that he is not yet certain what he plans to do after he leaves AIBS.

At the same time, John R. Olive, deputy executive director, was appointed executive director, and Charles A. Ossola was reaffirmed as general manager.—D.S.G.

Education: Wiesner Asks Action on Pre-College Science Teaching, Offers Fairly Modest Proposals

While the need for an ample supply of scientific and technical manpower is generally recognized in the United States as a national problem, politics, as much as logic, has shaped the national government's role in the field. Federal action affecting higher education has been concentrated largely on supporting expansion of graduate education, while at the high school level, federal emphasis and money have been limited to efforts to improve curriculum and upgrade teaching.

In a speech last week, Jerome Wiesner, who, as the President's science adviser and head of the new Office of Science and Technology, is the administration's grand vizier for science, asked that more be done to raise the pre-college educational standards in the United States. In his 2 years as science adviser, Wiesner appears to have grown more and more concerned with problems of manpower and education, and a main ingredient of the speech last week seemed to be the acid fruit of experience with education legislation.

Wiesner's subject was "Education for creativity in the sciences," at a 3-day conference on the same subject at New York University. Addressing himself to the problem of increasing national productivity in science and speaking in the context of national policy, Wiesner's prime conclusion was that "initially our quantitatively most important source of new creativeness will be the large proportion of our youth which is now for one reason or another, either denied the opportunity for the necessary education, or is not motivated sufficiently by our society to seek it."

Wiesner based his case on the now familiar dual argument that action is urgently needed because of rapid technological change in the United States—with resulting technological unemployment—and because the Soviet Union is now outproducing us in scientific and technical manpower, in part by according their scientists, engineers, and technicians relatively higher social status and material rewards than we accord ours.

In discussing the prospects for new federal programs at the pre-college level, Wiesner demonstrated a grasp of the governing realities when he said, "The responsibility for the general character of our elementary and secondary

school systems is divided among thousands of individual school boards, all generally independent of central control as to the primary elements determining the academic effectiveness of the institutions under their supervision. And this circumstance introduces enormous political and practical rigidities into the overall system, if serious consideration such as basic curricular changes or teacher selection and compensation, is to be proposed."

Wiesner also conceded that the outlook for broad education legislation "is not hopeful" and that the problem is greatly complicated by the private school (church-state) issue. But he then went on to say that, while attempts to solve basic social issues must be continued, "it is also important to pursue simultaneously a more operationally oriented program, one which seeks to resolve important particular problems somewhat independently of more general issues."

In this latter category Wiesner, as pragmatist, placed the recommendations of the President's Science Advisory Committee (PSAC) toward increasing opportunities for graduate level training in the fields of engineering, mathematics, and physical science.

The Operational Approach

Pursuing the "operational approach," Wiesner observed that the "next logical segment of the educational system on which further attention might be focused . . . is the secondary school level."

In addition to calling for an extension to other grades and subjects of work in curriculum development and teacher training supported by the National Science Foundation, Wiesner made two new and noteworthy suggestions: (i) federal assistance to special science high schools to be operated by city or state authorities, and (ii) a major project to expand and upgrade science instruction in Washington, D.C., schools.

Both ideas, which were only roughly sketched in the speech, are aimed at helping to overcome deficiencies in background or opportunity which constrict the flow of scientific and technical manpower. Though carefully phrased, probably in deference to congressional, and especially Southern congressional sensitivities, his proposal for the experimental project in the District of Columbia suggests that there are special problems in D.C.—where a large majority of the students are Negroes, many of them disadvantaged, and where school facilities and budget have been inadequate—that make the system an ideal laboratory.

The models for the special science high schools are the Bronx Science High School and the relatively few similar science schools with high standards and competitive admissions policies. Wiesner would sidestep the issue of federal control by having a city, county, or state authority run the school, with the federal government contributing. An intriguing line in his text reads, "The admission of students would be on the basis of rigorously competitive academic aptitude examinations, with the costs of attendance for those winning admission, but in need of financial assistance, being provided by the school through arrangements with the state and federal government." This implies boarding school arrangements for children coming from rural areas and perhaps from urban slums and hints at a startingly new type of American public high school.

It will be interesting to see if there is a legislative response to Wiesner's proposals. Congressional reaction to bills embodying the ideas might well indicate whether or not Congress really believes an emergency in scientific and technical manpower is developing.

An incidental effect of the speech is to identify Wiesner as a critic—implicitly and without hyperbole—of the status quo in public education and to suggest that he will be having more to say on the subject.—JOHN WALSH

Bill Providing Science Advisory Staffs for House and Senate May Be a Step in a New Direction

One swallow maketh not summer, but the introduction last week in the House of Representatives of a bill to establish a science advisory staff in both the House and the Senate, comes as a further sign of the growing uneasiness of Congress over its lack of access to competent and objective advice on scientific matters.

It should be recognized that, in the congressional scheme of things, this new bill (H.R. 6866), introduced by Representative Abner W. Sibal (R.–Conn.), has rather meager immediate prospects, both because it is a brand new legislative idea and because it was put forward by a freshman member of the minority party. A realistic view of the measure probably is that it is an opening bid and serves a useful purpose by spelling out a plan for improving the science advisory apparatus of Congress and by making that plan available for criticism and, perhaps, for eventual action.

If the odds appear to be against early success for the Sibal proposal, the sentiments Sibal expressed in a statement issued when he introduced the bill are gaining force in Congress.

"For a long time," said Sibal, "the Executive Branch has had a near-monopoly of scientific talent in government. Although the President and the major departments and agencies have scientific staffs which consult on the tremendous range of highly technical issues concerning the Government, Congress does not. Members of Congress, who are nearly always people untrained in science, have to rely chiefly on scientists from the Executive Branch whose task is to defend their programs and seek the funds to run them.

"It has become increasingly difficult for Congressmen to question programs sent down from the Executive side. This is extremely serious when one considers that it is Congress that must decide whether to vote the money and, if so, how much. Right now, for example, we are weighing the question of whether to authorize billions and billions in the race to the moon. We should not have to be so dependent on the Executive for technical advice. The lack of independent scientific resources must be corrected if Congress is to fulfill its responsibilities as direct representatives of the people and is not to become, through lack of proper tools, a mere rubber stamp for the Executive Branch."

Under Sibal's proposal, each house of Congress would get a science advisory staff headed by three professionals "available to the committees and members of the House of Congress within which it is established and to conference committees of the two Houses of Congress to give scientific advice and assistance in the analysis appraisal and evaluation of legislation or proposed legislation."

The three-man staff could not be expected to assist on all the questions on science and technology that the legislators might put to them, but would be expected to arrange for the services of consultants and for the convening of panels of experts on terms much the