

sions with his counterparts of the Non-Proliferation Treaty, which he strongly supported. He has headed the U.S. delegation to the International Atomic Energy Agency General Conference annually since 1961, was a member of Secretary Rusk's delegation to Moscow for the signing of the Limited Test Ban Treaty in 1963, and was chairman of the U.S. delegation to the Third Geneva Conference on Peaceful Uses of Atomic Energy in 1964.

Seaborg's honors have been extensive and are far too numerous to list. Best known are the major awards for scientific achievement; the Nobel prize (with E. M. McMillan) for work in the chemistry of the transuranium elements in 1951, and the Atomic Energy Commission's Fermi award for work in

nuclear chemistry and his leadership in scientific and educational affairs in 1959. The Arches of Science Award was presented in 1968 by the Pacific Science Center for contributions to the public understanding of science in a complex and changing society. He has been recognized nationally and internationally by honorary degrees and memberships in various academies and professional societies. An early indication of these honors to come was his selection by the U.S. Junior Chamber of Commerce as one of America's ten outstanding young men of 1947, a recognition of early clear-cut achievements in a specific field coupled with the promise of broader contributions to come.

The president-elect comes to the

AAAS as a highly qualified proponent of science; an able practitioner of communication and understanding in the arts, humanities, and sciences; a firm believer in youth and the future of the world; and a gentleman sensitive to the views of others. His vigor and ability to fit everything into the 168-hour week will still permit time with his wife, the former Helen Griggs, and their six children; occasional attendance at a sports event; and a myriad of public service activities—in addition to his continuing obligations to the government in particular and to science and education in general.

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AAAS Council Meeting, 1970

William Bevan

The AAAS Council met in Chicago on 30 December 1970 in the Grand Ballroom of the Conrad Hilton Hotel. President Athelstan Spilhaus presided. Two hundred and thirty Council members attended. The meeting was called to order at 9:00 a.m. and was adjourned at 12:35 p.m. (The recent procedural changes of holding elections by mail ballot and of circulating written reports of the chairman of the Board and the chairmen of committees to Council prior to the meeting represent genuine economies of time.)

Executive Officer's Report

The Council began its business by formally accepting the report of the chairman of the Board of Directors. The presiding officer then called on the new executive officer to present the 1971 operating budget approved by the Board at their meeting of 12–13 December 1970. In doing so, Dr. Bevan took occasion to review the growth and development of the Asso-

ciation during the term of his able predecessor, Dr. Dael Wolfle. During the past 15 years, the Association's membership has grown from 52,000 to 133,000; its annual general income budget from less than \$750,000 to more than \$5 million. While *Science* and the Annual Meeting have continued to be the most publicly visible of the Association's programs, the most dramatic development in recent years has been the emergence of action programs directed toward the science-in-society theme first enunciated at the Arden House Conference. During the past year, special attention has been given to the role of youth in the Association's programs.

The 1971 Budget

In his presentation of the budget (see Table 1), the executive officer reported that, for the second time in 30 years, the Association had operated at a deficit during 1970. This was estimated to be of the order of \$150,000.

The deficit was attributed to four factors: (i) an unanticipated drop in advertising revenues, presumed to result from the general decline in business activity and from recent federal policies on the funding of research; (ii) increased costs of the Annual Meeting; (iii) increased activity of commissions and committees; and (iv) recent inflationary trends. The last mentioned represents, perhaps, the most serious long-term problem for organizations like AAAS. The dues dollar last approved by Council is now worth only 84 cents, and operating costs have suffered marked increases. For example, manufacturing costs of *Science* have gone up 15 percent; postage, 20 percent; utilities in the Washington area, about 11 percent; airline fares, 25 percent; and office personnel costs in the Washington area, 34 percent.

The 1971 general revenue budget is approximately at the same level as that approved for 1970 (\$5,141,200); for 1971, revenue projections total \$5,048,200. On the expense side, the loss in advertising revenue will be compensated for in part by increasing the subscription rate for *Science* to nonmembers to \$20, by passing on delivery costs of foreign subscriptions, by eliminating the 1 January issue, and by other similar measures. The remaining costs can be met only by a drastic cut-back in program or by seeking an increase in dues. Accordingly, the executive officer indicated that, in the very near future, Council would be asked to approve an increase in dues from \$12 to \$16, effective 1 May 1971.

Elections

The presiding officer announced the outcome of the balloting conducted between 10 November and 10 December:

President-Elect

Glenn T. Seaborg, Chairman, U.S. Atomic Energy Commission

Members of the Board of Directors

Barry Commoner, Director, Center for the Biology of Natural Systems, and Professor of Plant Physiology, Washington University (reelection)

Caryl P. Haskins, President, Carnegie Institution of Washington

Members of the Committee on Council Affairs

John E. Cantlon, Provost, Michigan State University

Ward H. Goodenough, Professor of Anthropology, University of Pennsylvania

S. Fred Singer, Deputy Assistant Secretary for Scientific Programs, U.S. Department of the Interior

Members of the Committee on Nominations and Elections

S. Charles Kendeigh, Professor of Zoology, University of Illinois

Kenneth C. Spengler, Executive Secretary, American Meteorological Society, Boston

Appointments

The Board of Directors announced the appointment of three new section secretaries:

Section on Dentistry (Nd)

Sholom Pearlman, Director of Program Development, University of Colorado School of Dentistry

Section on Pharmaceutical Sciences (Np)

John Autian, Director, Materials Science Toxicology Laboratories, University of Tennessee Medical Units

Section on Industrial Science (P)

Jordan D. Lewis, Manager of General Operations, Battelle Development Corporation (to complete the remaining 2 years of the term of Burton V. Dean)

Governance

Dr. Leonard Rieser, chairman of the special Board of Directors-Committee on Council Affairs Committee on Governance, made a progress report to Council. He reviewed the committee's charge, outlined its schedule of meet-

Table 1. AAAS budget for 1971.

Revenue	
Dues of annual members	\$1,795,000
Life members' subscriptions	48,000
Nonmember subscriptions	485,000
Subscriptions: <i>Science Books</i>	34,000
Advertising in <i>Science</i>	2,000,000
Sales of publications:	
Symposium volumes	90,000
Reprints from <i>Science</i>	150,000
Back issues of <i>Science</i>	10,000
Binders and emblems	6,000
Book lists	50,000
Meeting and exposition	
Registrations	75,000
Booth space	35,000
Program advertising	4,000
Contributions	25,000
Sales of audiotapes	50,000
Meeting cost charged to affiliates	15,000
Rental receipts	2,700
Royalties	13,500
Income from investments:	
dividends and interest	85,000
Administration of projects	60,000
Other income	15,000
Total revenue	\$5,048,200
Expenses	
General administration and services	
Administrative offices	\$ 131,750
Business offices	231,500
Membership recruitment	125,880
Membership records	94,090
Addressing	76,800
Building maintenance	89,460
Depreciation of building and equipment	47,020
Miscellaneous expense	19,500
Contingency	10,000
Central office departments	
<i>Science</i>	
Editorial office	542,000
Reprints from <i>Science</i>	75,000
News and Comment	160,450
<i>Guide to Scientific Instruments</i>	163,460
Printing and mailing	1,955,000
Advertising—cost of selling	500,000
Communication, Development, and Public Understanding of Science	
Office and program	55,000
Symposium volumes	58,415
<i>AAAS Bulletin</i>	15,000
<i>Science Education News</i>	4,800
Annual Meeting	
Meeting and exposition	236,950
TV coverage at meeting	25,500
Audiotapes	25,000
Section expenses	24,200
Press service	19,700
Library and Science Bibliographies	
Office and editorial	55,050
<i>Science Books</i>	25,250
Book lists	23,275
Science and society	60,000
Science education	3,400
Congressional staff seminars	2,500
Board of Directors and Committees	
Board of Directors	15,000
Committees	
Science in the Promotion of Human Welfare	16,000
Environmental Alterations	22,000
Herbicide Assessment Commission	10,000
Commission on Science Education	2,500
Youth Council	20,000
Council Affairs	2,500
Arid Lands	2,700
Public Understanding of Science	*
Other committees	2,800
Division allowances	26,500
Reserve	65,000
Total expenses	\$5,040,950
Net revenue	\$ 7,250

* To be financed by \$20,000 in grant funds.

ings, and briefly commented on the major directions of the committee's thought. Two principles are predominant: (i) opportunity for participation in governance by the membership at large; and (ii) more efficient governmental procedures, designed with a much larger membership in mind. Measures under consideration are the direct election of officers, a reorganization of Council, and a smaller Council. The committee expects to have a proposal ready for review well before the 1971 Council meeting. Dr. Rieser urged the Council members to submit their views on governance to the committee via the executive officer and expressed the hope that they make every effort to attend the 1971 meeting prepared to take action on this extremely important matter. Later in the meeting, Council took further note of the work of the Committee on Governance and provided the following guideline: "The Committee on Governance is advised that it is the sense of the Council that any changes in governance should insure that the control of the activities of AAAS will be in the hands of *bona fide* scientists or societies of scientists. This is not meant to restrict individual membership of persons in AAAS for the purposes of being sympathetic to its objectives or of being informed of its activities."

Herbicide Assessment

Dr. Matthew S. Meselson, chairman of the Association's Herbicide Assessment Commission, presented a brief summary of the commission's program over the past year and stated that the commission expects to publish a full report within the next 3 months. (An account of the commission's work appeared in the 8 January 1971 issue of *Science*, page 43.) At an appropriate point during the meeting, Council voted expressions of deep appreciation to Dr. Meselson for his leadership of the commission and to E. W. Pfeiffer for his role in urging the Association to undertake the field study in Vietnam carried out by the commission last August.

Affiliation

Upon recommendation of the Committee on Council Affairs and the Board of Directors, Council voted to grant affiliation to the International

Communication Association, the National Association of Social Workers, and the Rural Sociological Society.

Constitutional Amendments

The Committee on Council Affairs and the Board of Directors recommended to Council that Section 1 of Article IX be amended by adding at the end of the section the following sentences: "Council representatives named by affiliated organizations shall serve for terms of at least three years. If a named representative of an affiliated organization is unable to attend a meeting of Council, and if the organization wishes to be represented by a substitute, the substitute shall be the president of the organization."

After consideration, Council voted to change the final clause of the amendment ("the substitute shall be the president of the organization") to "the president of the organization shall designate a substitute who shall preserve, insofar as possible, continuity of representation in the Council," and to adopt the amendment in its revised form.

The Board of Directors next recommended to Council that Section 2 of Article II be deleted in its entirety. The section reads: "Students. Under such rules as the Board of Directors may prescribe, students may be elected as Student Members or as Honorary Junior Members. Persons in neither category shall be considered as Members of the Association."

Council voted to delete this section from the constitution.

Resolutions

The Committee on Council Affairs reported that it had received and distributed to Council members 13 resolutions; that it had held open hearings on these resolutions on the afternoon of 27 December; and that it recommended for adoption modified versions of Resolution 1 on chemical defoliants, Resolution 4 on the metric system, and Resolution 12 on equal opportunity. The texts of the versions adopted after Council debate are as follows:

Chemical Defoliants

Whereas the AAAS has previously expressed its concern to the United States Government regarding the health-related and ecological consequences of the use of defoliants in Vietnam, and

Table 2. AAAS membership.

<i>Changes during 1970</i>		
New members		23,823
Losses:		
Deaths	531	
Resignations	4,866	
Dropped for non-payment of dues	12,779	18,176
Net increase during 1970		5,647
<i>Totals as of 31 December 1970</i>		
Annual members in good standing		124,209
Graduate student members		5,215
Life and emeritus members		3,940
Total active membership		133,364

Whereas there is now strong evidence that the antiplant chemicals used for defoliation and crop destruction in Vietnam have seriously damaged the ecology of that country and may be a serious threat to the health of the Vietnamese people and particularly to the health, livelihood, and social structure of Vietnam's hill tribes (Montagnards), and

Whereas the Department of Defense last April 15, 1970, issued an order to end the spraying of agent Orange because of its proven toxicity to experimental animals, and

Whereas the consequences of the use of agents Blue and White, still authorized and in massive use in Indochina, are not known,

Therefore be it resolved that the Council of the AAAS commends the United States Government for its intention announced on December 26, 1970, rapidly to phase out the use of all herbicides in Vietnam and recommends their immediate discontinuation in Indochina.

Metric System

Whereas now as never before scientists, engineers, and industry throughout the world are endeavoring to coordinate their efforts, and

Whereas this coordination should be encouraged by scientific and professional organizations, national governments, and individuals; and the United States has long been noted for its policies of international scientific cooperation, and

Whereas communications are essential to cooperation and coordination in any realm of endeavor, and

Whereas uniform standards and measurement systems are of basic importance to scientific communication, and

Whereas many industries are finding increased metric usage advantageous, and

Whereas the Secretary of Commerce will submit in August 1971 to the Congress of the United States the results of a study by the National Bureau of Standards recommending a future course of action for the United States with respect to metric usage,

Therefore be it resolved that the AAAS urges its members to familiarize themselves with the modernized metric (S I) system and use it in their published work whenever effective communications are not impaired by doing so, and that the AAAS urges the Federal Government in its study of alternative national policies toward metrication to recommend a clear

national commitment to eventual conversion to predominantly metric usage and plan specific steps for implementing a voluntary national program of conversion during the coming decade.

Equal Opportunity

Be it resolved that the AAAS reaffirm its commitment to (1) the principle of equal opportunity for all scientists, regardless of sex, race, creed, or national origin, to follow their scholarly and professional interests and (2) the principle of their recognition and treatment, in wages and all other respects, on the basis of merit alone.

Committee on Scientific Freedom and Responsibility

Dr. H. Bentley Glass, chairman of the Board of Directors, reported that the Board had created a new Committee on Scientific Freedom and Responsibility, the purpose of which is (i) to study and report on the general conditions required for scientific freedom and responsibility, (ii) to develop suitable criteria and procedures for the objective and impartial study of these problems, and (iii) to study and report on specific instances in which scientific freedom is alleged to have been abridged or otherwise endangered or responsible scientific conduct is alleged to have been violated. The committee will consist of five persons, scientists and nonscientists, selected for their integrity, independence, and relevant competence, none of whom may be an officer of AAAS.

Nominations

As its final action of business, the Council approved the following statement, introduced from the floor: "Be it moved that the Council of the AAAS make every effort to protect and further the AAAS as the largest and most influential agency for the impartial and independent action on behalf of science and the freedom and integrity of scientists, and that therefore the Committee on Nominations and Elections avoid the nomination of officers whose other affiliations might involve them in conflict of interest."

Growth in Membership

A record of membership growth during the past year, both in terms of net increase and total membership, is summarized in Table 2.