

unthinkable that it, or something like it, should not exist.

The committee has no exact parallel: the National Security Council, for example, is an even more important body concerned with over-all national security policy, but its existence is required by law, there is some public accounting of the money spent on it; and its members, except for the President and Vice President, can be questioned by Congress, not, of course, in their roles as members of the council, but as operating heads of departments concerned with national security affairs.

Role of the Committee

The peculiar position of the Science Advisory Committee is exaggerated here to make clearer the distinction between it and other parallel bodies in the government. Yet the difference is real enough so that one of the leading arguments for establishing a cabinet department of science has become the desire to remove at least some of its functions from the President's confidential staff to a place where Congress can keep a closer eye on how national science policy is made.

The difficulty is compounded by the nature of the advice the committee gives, which falls in an area where neither Congress nor the President has much of the independent expertise which both command on other policy matters. There is some feeling in Congress that this is an area where, more than in any other area, the President is forced simply to take advice, rather than receive information and then make up his own mind. Therefore, this reasoning goes, he and the country should be protected by making sure that it is possible to have independent criticism of the advice he is getting. One way, and perhaps the only way, to do this, and a way which especially appeals to Congress, would be to give Congress some authority to inquire into how policy is being made.

These comments by no means give a full or fair picture of all the factors involved; they are intended only to summarize the kind of misgivings that exist about the role of the committee. An excellent argument can be made for keeping the Science Advisory Committee just the way it is.

But whatever the wisest kind of organization, the President clearly has at least a touchy problem in political tactics in dealing with Congressional feelings on these points.—H.M.

News Notes

Venus Studied with Radio Signals

First success in a 2-month experiment in which radio signals are being used to study the planet Venus has been announced by the National Aeronautics and Space Administration. Hugh L. Dryden, deputy administrator of NASA, and William H. Pickering, director of the Jet Propulsion Laboratory, announced reception of strong, clear radio signals reflected back to earth from Venus in a 70-million-mile round trip that took about 6½ minutes. The transmission was completed at 9:34 P.M. EST, 10 March, at the Jet Propulsion Laboratory's Goldstone Tracking Station, 50 miles north of Barstow, Calif., in the Mohave Desert. The Jet Propulsion Laboratory is operated for NASA by California Institute of Technology.

Dryden said that signals have been bounced off Venus in other experiments but that this is the first time such signals have been immediately detectable without elaborate analysis and processing. The objectives of the experiment are to (i) determine whether Venus spins on its axis and, if so, at what speed of rotation; (ii) determine the orientation of the planet's spin axis; (iii) investigate the nature of the surface of Venus as determined by the reflectivity of its surface; and (iv) further define the measuring stick of the universe, the approximately 93-million-mile astronomical unit. (The length of the unit, the mean distance from the earth to the sun, has been defined only to within about 10,000 miles.)

Venus, which lies between Mercury and the earth, is the planet nearest the earth and long has been of interest to astronomers, but its atmosphere of dense clouds has hindered observation. Every 19 months Venus approaches to within about 26.2 million miles of the earth; its maximum distance from the earth is 162 million miles. This closest approach, known as the inferior conjunction, occurs this year on 11 April.

At the present stage of development of radio communication it is impractical to attempt radio contact with Venus except during comparatively brief periods before and after inferior conjunction. However, the Goldstone experiment will continue for several weeks after the 11 April date.

AEC Acts to Separate Regulatory Function

Chairman Glenn T. Seaborg of the Atomic Energy Commission has announced that the commission has acted to separate its regulatory function from the operational and developmental functions at the general manager level. The first step in this separation is the designation of Harold L. Price as acting director of regulation; he will report directly to the commission. Price has been director of the Division of Licensing and Regulation.

Price has been authorized to discharge the licensing and other regulatory functions of the commission, other than those where the final decision rests with the hearing examiner or the commission, or those which involve the commission's authority to approve the issuance of regulations. General manager A. R. Luedecke will continue to administer the commission's operational and developmental activities.

In a report made to the Joint Committee on Atomic Energy of Congress, in February, the commission outlined certain contemplated changes in the regulatory organization. This first step is taken in accord with that plan. These actions do not in any way prejudice possible additional steps the commission might wish to take following consideration of a similar study being completed by the staff of the Joint Committee on Atomic Energy.

Price will submit to the commission a report on the staffing of the regulatory function. He will have the cooperation of the general manager and the general counsel in the preparation of this report. Pending completion of the staffing report, the Divisions of Licensing and Regulation and of Compliance and the Office of Health and Safety are transferred to the acting director of regulation.

Robert Lowenstein has been designated acting director of the Division of Licensing and Regulation, succeeding Price. Lowenstein has been serving as counsel for the division.

AAAS Socio-Psychological Prize

Through the generosity of an anonymous donor, the AAAS offers an annual prize of \$1000 for a meritorious essay in sociopsychological inquiry. Previous winners of this prize and the titles of their essays have been: Arnold

M. Rose, "A theory of social organization and disorganization"; Yehudi A. Cohen, "Food and its vicissitudes: a cross-cultural study of sharing and non-sharing in sixty folk societies"; Herbert C. Kelman, "Compliance, identification, and internalization: a theoretical and experimental approach to the study of social influence"; Irving A. Taylor, "Similarities in the structure of extreme social attitudes"; Stanley Schachter, "The psychology of affiliation"; and Robert Rosenthal, "Three experiments in experimenter bias."

The conditions of competition for the prize to be awarded at the 1961 annual meeting, to be held in Denver, Colorado, from 26 to 31 December, are as follows.

1) The contribution should further the comprehension of the psychological-social-cultural behavior of human beings—the relationships of these hyphenated words being an essential part of the inquiry. Whether the contributor considers himself to be an anthropologist, a psychologist, a sociologist, or a member of some other group is unimportant as long as his essay deals with basic observation and construction in the area variously known as social process, group behavior, or interpersonal behavior. For ease of reference in the rest of this statement, this general area will be called "social behavior."

2) The prize is offered to encourage studies and analyses of social behavior based on explicitly stated assumptions or postulates, which lead to experimentally verifiable conclusions or deductions. In other words, it is a prize intended to encourage in social inquiry the development and application of dependable methodology analogous to the methods that have proved so fruitful in the natural sciences. This is not to state that the methods of any of the natural sciences are to be transferred without change to the study of social behavior, but rather that the development of a science of social behavior is fostered through observation guided by explicit postulates, which in turn are firmly grounded on prior observations. It may be taken for granted that such postulates will include a spatial-temporal framework for the inquiry. It may properly be added that the essay should foster liberation from philosophic-academic conventions and from dogmatic boundaries between different disciplines.

3) Hitherto unpublished manu-

scripts are eligible, as are manuscripts that have been published since 1 January 1960. Entries may be of any length, but each should present a completed analysis of a problem, the relevant data, and an interpretation of the data in terms of the postulates with which the study began. Preference will be given to manuscripts not over 50,000 words in length. Entries may be submitted by the author himself or by another person on his behalf.

4) Entries will be judged by a committee of three persons considered well qualified to judge material in this field. The judges will be selected by a management committee consisting of the chairman and the secretary of Section K and the executive officer of the AAAS. The committee of judges reserves the right to withhold the prize if no worthy essay is submitted.

5) Entries should be sent to Dael Wolfe, Executive Officer, American Association for the Advancement of Science, 1515 Massachusetts Ave., NW, Washington 5, D.C. Entries should be submitted in quadruplicate. Each entry should be accompanied by six copies of an abstract not to exceed 1200 words in length. The name of the author should not appear anywhere on the entry itself but should be enclosed on a separate sheet of paper which also gives the author's address and the title of his essay. Entrants who wish to have their manuscripts returned should include a note to that effect and the necessary postage. To be eligible for consideration for the prize that will be awarded at the 1961 annual meeting of the Association, entries must be received *not later than 1 September 1961*.

Serials Record Center Planned by Biological Sciences Institute

Establishment of a Biological Serials Record Center to facilitate communication between scientists has been given first priority by the Biological Sciences Communication Project of the American Institute of Biological Sciences. Unless the scientific intercommunication problem is solved, the committee reports, scientists of the future may find that they are "buried under printed paper" and that their research is aimed at finding knowledge which already is known.

The Serials Record Center would be charged with the task of collecting and disseminating detailed information re-

garding all serial or periodical publications in biology. Estimates of the number of these journals range from 25,000 to 50,000. The publications cover all aspects of biological research, including clinical medicine, agricultural science, and various botanical and zoological disciplines.

The site of the proposed center, the estimated cost of operation, and other details will be determined in the near future. The Biological Sciences Communication Project is headed by Charles W. Shilling. Its office is at AIBS headquarters, 2000 P St., NW, Washington 6, D.C. Members of the project's executive committee include J. Roger Porter, Fred R. Cagle, and Foster Mohrhardt. Lincoln Constance of the University of California is chairman of the advisory committee.

News Briefs

Geneva test-ban conference. The conference on the discontinuance of nuclear weapon tests resumed its sessions in Geneva on 21 March, with U.S. representative Arthur H. Dean heading this country's delegation. Deputy U.S. representatives are Charles C. Stelle and David H. Popper, both of the United States Mission to the European Office of the United Nations, Geneva.

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IAEA-Norway research project. Sterling Cole, director general of the International Atomic Energy Agency, and Gunnar Randers, managing director of the Norwegian Institute for Atomic Energy, have announced the selection of Raja Ramanna of India to be chairman of the management committee for the joint research program in reactor physics, in which Norway's zero power reactor, NORA, will be utilized. Selection of the chairman of this committee is a matter of mutual choice.

In addition, each of the parties names two committee members. Cole has selected Pierre Louis Balligand (France) and Carlo Salvetti (Italy) as IAEA representatives. Norway has named Olav Kasa and Henrik Ager-Hansen. The committee will hold its first meeting in the beginning of April at Kjeller, Norway, site of the NORA reactor.

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Graduate fellowships. The National Science Foundation has announced the award of 1537 graduate fellowships for the academic year 1961-62. Recip-

ients were selected from 4875 applicants from all parts of the United States and its territories. The foundation also released the names of 1588 persons accorded honorable mention. Of the awards, 347 were made in the life sciences, 1156 were made in the physical sciences (a number of these were in interdisciplinary fields), and 34 were made in certain areas of the social sciences.

Fellows may attend any appropriate nonprofit American or foreign institution. Graduate fellowships provide basic stipends (for 12 months) of \$1800 for the first-year level of graduate study, \$2000 for intermediate years, and \$2200 for the terminal year. Additional allowances are provided for dependents and tuition, as well as for travel.

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AIBS meetings. The annual joint meetings of biological societies sponsored by the American Institute of Biological Sciences will be held this year at Purdue University, 27 August to 1 September. Advance indications are that approximately 5000 scientists will participate and about 1500 research papers will be given, in 200 sessions. Local chairmen are John S. Karling, Wright distinguished professor of biological sciences, and E. C. Stevenson, head of the department of horticultural sciences.

Grants, Fellowships, and Awards

Biological psychiatry. The Society of Biological Psychiatry is offering an annual award which was made possible by the A. E. Bennett Neuropsychiatric Research Foundation. The \$500 award—part of which is to be used for traveling expenses to the society's meeting—will preferably be given to a moderately young investigator, not necessarily a member, for recent, unpublished work. The winning paper will be read as part of the annual meeting program and will appear with the other meeting papers in volume 4 of *Biological Psychiatry*. Papers should be submitted in quadruplicate before 30 April to Harold E. Himwich, Chairman, Committee of Award, Galesburg State Research Hospital, Galesburg, Ill.

Fulbright awards. The Committee on International Exchange of Persons of the Conference Board of Associated Research Councils has announced the program for the 1962-63 awards, under the Fulbright Act, for university lecturing and advanced research in the

following countries of the Pacific, South and Southeastern Asia, and Latin America: Australia and New Zealand; Burma, Ceylon, India, Korea, Pakistan, Philippines, and Thailand; Argentina, Brazil, Chile, Colombia, Ecuador, Paraguay, Peru, and Uruguay. Application forms and detailed program information may be obtained by writing to the committee at the National Academy of Sciences-National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C. Applications should be submitted before 25 April.

Heart disease reporting. Entries are now being received for the Howard W. Blakeslee Awards, to be presented by the American Heart Association for outstanding reporting in the field of heart and blood-vessel diseases. The contest year, which began March 1960, came to a close on 28 February. Newspaper and magazine articles, books, radio and television programs, and films published or produced during that period are eligible. Deadline for submission of entries is 1 May.

The winning entries and the number of awards will be determined by the Blakeslee Awards Committee of the American Heart Association. The awards carry an honorarium of \$500 each.

Entries submitted by local daily or weekly newspapers and local radio and television stations will be considered apart from those submitted by national wire services, syndicates, or radio-television networks and will be eligible for awards in separate categories. Entry blanks and rules folders may be obtained from local Heart Associations or from the American Heart Association, 44 E. 23rd St., New York 10, N.Y.

Medical student summer research. The Lederle Laboratories Division of the American Cyanamid Company has announced that it is making available to medical schools throughout the United States and Canada Lederle medical student research fellowships for the year 1961. These fellowships, in amounts not exceeding \$600 per year for any one individual, are intended to relieve in part the financial burden of students who desire to devote their summer vacations to research in the preclinical departments.

Applicants must be of good scholastic standing and must have the consent of the faculty member under whose supervision their research is to be conducted. Award recipients will be selected by the dean of the medical school,

or by the regularly constituted committee of the faculty charged with such selections. By special permission of the dean or the school's fellowship committee, a student may carry on his research in another medical school, provided that arrangements are previously made with that school.

Scientists in the News

Luis W. Alvarez of the University of California, Berkeley, will receive this year's \$5000 Albert Einstein Gold Medal and Award. Alvarez is professor of physics in the department of physics and a leader in the high-energy physics program at the university's Lawrence Radiation Laboratory. The award was announced on 14 March, the anniversary of Einstein's birth, by the trustees of the Lewis and Rosa Strauss Memorial Fund.

Ralph G. H. Siu, technical director of research and development in the Research and Engineering Division, Office of the Quartermaster General, Department of the Army, received one of the highly prized Career Service Awards of the National Civil Service League on 21 March, at a dinner in Washington, D.C. Siu was honored for his work in the radiation preservation of food. The league, a nonpartisan citizens' organization representing the public interest in improving government, this year gave its seventh series of Career Service Awards to ten federal employees chosen for competence, character, and outstanding achievements.



Ralph G. H. Siu

C. R. Barber and **J. A. Hall**, both of the National Physical Laboratory, Teddington, Middlesex, England, are in this country to attend the third Symposium on Temperature, in Columbus, Ohio, 27-31 March, and to spend some time at the National Bureau of Standards, Washington. Barber will also visit Boulder (Colo.), Ottawa, and New York.

J. F. Duke, senior scientific officer, Metallurgy Division, National Physical Laboratory, will attend a conference on the Ultrapurification of Semiconducting Materials, to be held in Boston, 11-13 April. His itinerary includes: Schenectady, N.Y.; Columbus, Ohio; Oak Ridge, Tenn.; Washington, D.C. (20-21 April); Philadelphia; and New York.

J. R. Lake, principal scientific officer, Road Research Laboratory, Harmondsworth, Middlesex, will visit Canada and the United States from 16 April to 17 May. His itinerary includes: Toronto; Hamilton, Ont.; Vancouver, B.C.; Edmonton, Alberta; Ottawa, Ont.; Washington, D.C. (12-13 May); and Chicago, Ill.

J. M. Shewan and **R. Spencer**, senior principal scientific officer and senior scientific officer, respectively, of the Torry Research Station, Aberdeen, Scotland, will attend the International Symposium of Marine Microbiology in Chicago, 20-24 April. Shewan will also spend 2 weeks in Gainesville, Fla.

The John and Mary R. Markle Foundation, New York, has announced the names of the 25 Markle Scholars in Medical Science appointed for 1961-66. For the first time since 1948, when these annual appointments were first made, a woman physician is among those selected. She is **Mary Ellen Avery**, assistant professor of pediatrics at Johns Hopkins University School of Medicine.

The purpose of the program is to help relieve the faculty shortage in medical schools by giving young teachers and investigators academic security and financial assistance early in their careers. Funds appropriated for the program total \$750,000. Grants are made to the 25 schools where the scholars will work (beginning 1 July). Each school will receive \$30,000, at the rate of \$6000 a year for the next 5 years, toward support of the scholar and his research. This year's Markle Scholars, in addition to Mary Ellen Avery, are as follows:

Walter F. Ballinger II, assistant professor (as of 1 July), Jefferson Medical College of Philadelphia, surgery.

André Barbeau, fellow and lecturer, University of Montreal Faculty of Medicine, neurology.

John R. Blinks, associate, Harvard Medical School, pharmacology.

Leon Cander, assistant professor, Hahnemann Medical College, internal medicine.

James D. Case, assistant professor, University of Washington School of Medicine, internal medicine and dermatology.

G. Daniel Copeland, instructor, University of Tennessee College of Medicine, internal medicine.

Frank W. Fitch, assistant professor, University of Chicago, Division of the Biological Sciences, pathology.

J. Alex Haller, Jr., assistant professor (as of 1 July), University of Louisville School of Medicine, surgery.

Monte Gene Holland, assistant professor, Tulane University School of Medicine, ophthalmology.

Ellis B. Keener, instructor, Emory University School of Medicine, neurosurgery.

Henry Neil Kirkman, Jr., assistant professor, University of Oklahoma School of Medicine, pediatrics.

Calvin M. Kunin, assistant professor, University of Virginia School of Medicine, preventive medicine.

Allan M. Lansing, lecturer (as of 1 July), University of Western Ontario Faculty of Medicine, surgery.

John A. Mannick, instructor, Medical College of Virginia School of Medicine, surgery.

Edward A. Mortimer, Jr., assistant professor, Western Reserve University School of Medicine, pediatrics.

Paul G. Quie, assistant professor, University of Minnesota Medical School, pediatrics.

Stanley L. Schrier, assistant professor, Stanford University School of Medicine, internal medicine.

Charles R. Sriver, demonstrator (as of 1 July), McGill University Faculty of Medicine, pediatrics.

William E. Shepherd, assistant professor (as of 1 July), University of British Columbia Faculty of Medicine, pathology.

Joseph C. Shipp, assistant professor, University of Florida College of Medicine, internal medicine.

Oliver Smithies, assistant professor, University of Wisconsin Medical School, medical genetics.

Ronald R. Tasker, clinical teacher (as of 1 July), University of Toronto Faculty of Medicine, neurosurgery.

James C. Warren, assistant professor, University of Kansas School of Medicine, obstetrics and gynecology.

George D. Zuidema, assistant professor, University of Michigan Medical School, surgery.

Hans Selye, professor and director, Institute of Experimental Medicine and Surgery, University of Montreal, will deliver the 40th Beaumont Lecture at the Wayne County Medical Society, Detroit, on 3 April. The subject of his lecture will be "The Pluricausal Cardiopathies."

Jean Theodore Delacour, internationally known zoologist, has been given the Addison Emery Verrill Medal for 1961 by Yale University's Peabody Museum. Delacour, recently retired director of the Los Angeles County Museum and president emeritus of the International Council for Bird Preservation, received the award at Yale early this month.

The Duke University Medical School has announced the following appointments, all effective 1 July.

Daniel C. Tosteston, associate professor of physiology at the Washington University School of Medicine (Saint Louis), has been named professor and chairman of the department of physiology to succeed **F. G. Hall**, who is retiring from the chairmanship.

John W. Moore of the National Institutes of Health has been named associate professor of physiology and chief of the school's Division of Cellular Neurophysiology.

Paul Horowicz, also of Washington University, has been named associate professor of physiology and chief of the Division of Muscle Physiology.

Lee Leiserson has joined the Directorate of Solid State Sciences of the Air Force Office of Scientific Research. He was formerly chemist with the AFOSR Directorate of Chemical Sciences.

Charles W. Lacaille, professor of biology at St. John's University (Jamaica, N.Y.) has won the university's Outstanding Teacher Award. The first faculty member at St. John's to be so honored, he will receive the \$1000 prize at the June commencement.