

States, recognizing this fact, have deployed strategic nuclear weapons with great care, never upsetting the precarious status quo which insured that these weapons would not be used in the absence of some vital challenge. . . . [this] sudden, clandestine decision to station strategic weapons for the first time outside of Soviet soil . . . is a deliberately provocative and unjustified change in the status quo which cannot be accepted. . . ."

It has been argued that the United States is not playing the game according to Kennedy's prescriptions when it stations *Polaris* submarines off the Soviet coast, but fundamental to the issue here is the fact that the *Polaris*, secure under water, need not have a nervous finger on the button. If missiles must exist, the *Polaris* type is probably the safest variety for both East and West. On the other hand, the soft Cuban emplacements, like all soft emplacements, put a premium on getting off the first shot and therefore are more likely to be attended by nervous fingers. Furthermore, while the Soviets hopefully took Castro's disturbed state of mind into account when planning security measures for the emplacements, the presence of nuclear-tipped missiles within walking distance of the Cuban leader did not contribute to the administration's peace of mind.—D. S. GREENBERG

Tobacco: Public Health Service Names Group To Study Effects on Health

The Public Health Service this week announced the membership of the special committee that will conduct its inquiry into the relationship between smoking and health.

Since some half-dozen politically potent southern states have an annual \$7 billion stake in tobacco, the PHS, with the White House looking on carefully, has gone to exceptional lengths to avoid any contention that the committee members may have prejudged the issue. In line with this, it was announced at the outset that "scientists who have already taken a strong public position pro or con will not be chosen."

The committee, comprising ten members, was drawn from a list of 150 scientists submitted last July by federal agencies, voluntary health organizations, and the tobacco industry.

The final selection was made by Surgeon General Luther L. Terry after each organization had been given the opportunity to eliminate nominees "for whatever reason." According to a PHS announcement, the committee will hold its first meeting on 9 and 10 November. The first phase of the study, to be completed "by next summer," will consist of "a comprehensive review of all available data on smoking and other factors in the environment that may affect health." A subsequent phase "will concern recommendations for action."

The committee members and their specialties are as follows:

Stanhope Bayne-Jones, former dean of Yale Medical School (1935-40), who has since served on various medical advisory bodies—nature and causation of disease in human population Bayne-Jones will also serve as special consultant to the committee staff.

Louis Fieser, professor of organic chemistry, Harvard—chemistry of tobacco smoke.

Emmanuel Farber, chairman, pathology department, University of Pittsburgh—experimental and clinical pathology.

Maurice H. Seevers, chairman, pharmacology department, University of Michigan—pharmacology of anesthesia and habit-forming drugs.

Leonard M. Schuman, professor of epidemiology, University of Minnesota School of Public Health—health and its relationship to the total environment.

Charles LeMaistre, medical director, Woodlawn Hospital, and professor of medicine, Southwestern Medical College, Dallas—internal medicine, infectious diseases, preventive medicine.

Jacob Furth, professor of pathology, Francis Delafield Hospital, New York—cancer biology.

Walter J. Burdette, head of surgery, University of Utah School of Medicine—clinical and experimental surgery, genetics.

John B. Hickman, chairman, department of internal medicine, University of Indiana—internal medicine, physiology of cardiopulmonary disease.

William G. Cochran, professor of statistics, Harvard—mathematical statistics, special application to biologic problems.

The committee is occupying quarters in the National Library of Medicine, Bethesda, Md., and has a staff consisting of a medical coordinator, a statistician, and an information officer.

Announcements

The International Atomic Energy Agency has agreed to assist in the establishment of a **Middle East Regional Radioisotope Center for the Arab States** in Cairo, for training in the application of radionuclides in medicine, agriculture, and research. The agreement, to become effective upon the participation of four Arab countries, stipulates that the United Arab Republic convert its National Radioisotope Center in Dokki, Cairo, into a regional center; make available free of charge certain facilities and equipment; and contribute financially toward the costs of the center. Thus far, Iraq, Kuwait, Lebanon, Libya, and Tunisia have pledged contributions; IAEA is arranging for additional financing under the United Nations expanded technical assistance program.

The U.S. Public Health Service plans to establish a **salt-water pollution research laboratory** in Kingston, R.I., to develop standards for marine-water uses. Studies at the \$1,715,000 facility will include measures of protection against toxic pollutants, effects of pollution on aquatic life, criteria for radioactive wastes and other pollutants, and effects of distribution by water currents in bays and harbors.

Manuscripts, letters, photographic material, or memories of the late **Albert A. Michelson** (1852-1931), physicist and first American Nobel laureate in science, are being solicited by his daughter for use in the preparation of his biography. (Dorothy M. Stevens, 209 E. 72 St., New York 21)

Meeting Notes

An international **arms control** symposium will be held from 17 to 20 December in Ann Arbor, Michigan. The symposium, co-sponsored by the University of Michigan and the Bendix Corporation, is intended to provide a current summary of the status of arms control and disarmament. Emphasis will be placed on basic and applied research necessary in the political, social, and physical sciences to provide an adequate system for the formulation, verification, and compliance with possible agreements for international arms control and disarmament.

ment. The program includes technical panels on strategy in arms control, policies and negotiations, inspection and certification, sanctions and international organization, and industry research. (International Arms Control Symposium, P.O. Box 1106, Ann Arbor, Mich.)

Investigators with new data on **developing brain** or on binding sites of **brain biogenic amines** are invited to submit brief discussions for inclusion in an international symposium, to be held from 1 to 3 March in Galesburg, Ill. Deadline: *15 January*. (Harold E. Himwich, Research Div., Galesburg State Research Hospital, Galesburg, Ill.)

Scientists from seven major NASA field centers are meeting in Chicago this week to discuss the **national space program** with representatives of over 300 U.S. educational institutions. Specific purposes of the 3-day conference are to inform university administrators of the scope and magnitude of the space program, provide faculty members with an authoritative up-to-date review of space science and technology, emphasize and outline the need for better-trained students and higher caliber research, and motivate universities to take more interest in the upgrading of faculties, curricula, and facilities to meet national goals in space exploration. Proceedings of the conference are to be published as a current reference on the space program.

Scientists in the News

Recent awards of the Optical Society of America:

Max Herzberger, of the Eastman Kodak Company's Research Laboratories, the 1962 Frederic Ives Medal for "contributions to optics and image formation."

Alfred Kastler, professor of physics at the University of Paris, the first C. E. K. Mees medal for "contributions to the science of optics."

Arthur L. Samuel, director of research communications at International Business Machines Corporation, has been named editor of the quarterly *IBM Journal of Research and Development*. He succeeds **Bruce MacKenzie**, who recently joined the Peace Corps.

Francis H. C. Crick, of the Institute for Molecular Biology, Cambridge, England, and co-recipient of the 1962 Nobel prize in medicine and physiology, has won the \$25,000 Gairdner Foundation award of merit for his work on the genetic code. Crick is the first to receive the award since 1959.

Additional Gairdner Foundation awards of \$5000 each will go to:

Albert H. Coons, of Harvard Medical School, for his development of a method for tagging proteins with fluorescent dyes.

Clarence Crafoord, of the Karolinska Institutet, Stockholm, for his contributions to development of the heart-lung machine.

Henry G. Kunkel, of the Rockefeller Institute, for his work on the formation and behavior of protein molecules.

Stanley J. Sarnoff, of the National Institutes of Health, for his work in cardiac physiology.

Georg F. Springer, associate professor of immunology at the University of Pennsylvania, has been appointed professor of microbiology at Northwestern University and director of the new department of immunochemistry research at Evanston (Ill.) Hospital Association.

Recent staff appointments at the University of Maryland:

Robert Karplus, professor of physics at the University of California (Berkeley), as visiting professor for the 1962-63 academic year.

Gus T. Zorn, of Brookhaven National Laboratory, as associate professor in high energy physics.

Charles W. Misner, of Princeton University, as associate professor of physics, effective in the spring semester.

Recent awards of the Botanical Society of America:

Paul B. Sears, Babcock professor of botany at Wake Forest College, the Brooklyn Botanic Garden award for "contributions in the interpretation of botany to the general public."

Roderic B. Park and **Ming G. Pon**, of the University of California (Berkeley), the New York Botanical Garden award for "contributions to the fundamental aspects of botany."

Mary B. Allen, of the Kaiser Foundation Research Institute, Richmond, Calif., the annual Darbaker prize for "contributions to phycology."

Wilhelm Moll, assistant medical librarian and adjunct assistant professor of community medicine at the University of Kentucky Medical Center, has joined the faculty of the University of Virginia School of Medicine as associate professor of preventive medicine and librarian of the medical library.

Paul W. Vittum, head of the color photography division at Eastman Kodak Research Laboratories, Rochester, N.Y., has received the Herbert T. Kalmus award of the Society of Motion Picture and Television Engineers for his work in the chemistry of color photography.

Recent Deaths

Carleton P. Barnes, 59; staff assistant to the administrator of the U.S. Agricultural Research Service, and former chairman of the National Academy of Sciences' committee on a national atlas; 18 Sept.

Bruce R. Billmeyer, 54; chemist and assistant director of research for Armstrong Cork Co., Lancaster, Pa.; 7 Oct.

Carl H. Brown, 54; retired senior pharmacist at the National Institutes of Health; 1 Oct.

John F. X. Cline, 33; chief of the allergy and immunization clinic at Andrews Air Force Base Hospital, Camp Springs, Md.; 3 Oct.

George D. Ruehle, 64; vice director in charge of the University of Florida's Sub-Tropical Experiment Station, Homestead; 22 Aug.

Lloyd W. Stephenson, 86; retired chief of the U.S. Geological Survey's Coastal Plain Section; 13 Oct.

Guy P. Thompson, 67; retired associate professor of anatomy at the University of Maryland School of Dentistry; 20 Sept.

William R. Tomlinson, Jr., 50; chemist and professional staff member of the Research Analysis Corporation, Bethesda, Md.; 21 Sept.

Erratum. An error and a misrepresentation occur in the report "Bovine thyroid iodine-131 concentrations subsequent to Soviet nuclear weapon tests," by C. Blincoe and V. R. Bohman [*Science* 137, 690 (1962)]. The maximum and average radiation dose to the thyroid gland should have been reported as 2.2 and 1.1 rads, respectively, per gram of fresh thyroid tissue, rather than 1.1 and 0.55 rad per gram. The maximum and mean total thyroid doses would then be 74 and 38 *gram* rad for a thyroid of mean weight 34 g, rather than 37 and 19 rads, as stated in the original paper.

Erratum. The correct address for the publisher of the new journal, *Ethnology* [*Science* 138, 3536 (1962)], is University of Pittsburgh Press, 3309 Cathedral of Learning, Pittsburgh 13, Pa.