NEWS and Notes

A Presidential Commission on Science and National Security was recently proposed by the Federation of American Scientists in a letter cosigned by 145 prominent scientists and sent to the President July 8. Initial reaction from the White House indicates that even wider sponsorship will be required if the proposal is to be given favorable consideration. The text of the letter is reproduced here:

"The current controversy over the Atomic Energy Commission has once again focused attention on the problem of security in relation to scientific discovery. We are deeply disturbed by the misconceptions which have been voiced recently on this subject, and by some measures which have been proposed for the prevention of espionage directed at our atomic weapons. We fear that in the heat of controversy important values are being overlooked and may be carelessly sacrificed.

"The dilemma of secrecy vs. long-range security has plagued us since the end of the war. The demonstration of the potency of science as a military adjunct, so dramatically and horrifyingly driven home at Hiroshima, has led to two almost universally accepted conclusions—first, intensive cultivation of science is essential to national security; second, since scientific knowledge, of certain kinds and in certain circumstances, may have great military significance there are advantages in withholding it from potential enemies. We are slowly becoming aware, as a nation, that ill-considered implementation of these two conclusions can lead to very serious conflicts. For the narrowest interpretation of military security demands that we reveal nothing that might conceivably be useful to a potential enemy, and that the information of possible military significance available to any individual scientist be kept at a minimum. On the other hand, the experience of science is that the withholding of knowledge, or the abridgment of freedom of thought, is a deadly contamination which very rapidly inhibits research. How are we to reconcile these two apparently conflicting requirements? How can we safeguard in *existing* knowledge what is essential to military security, without so debilitating science as to sacrifice the hope of obtaining *additional* knowledge?

"You yourself, Mr. President, pointed out the importance of scientific progress to the national welfare, and the grave danger to science of the continuance of an atmosphere of suspicion and distrust. For five years we have been trying to balance the legitimate security needs of the nation against the equally insistent needs of free scientific inquiry. Largely this has been done by improvisation in individual instances with little attempt to develop or follow a comprehensive national policy. Security decisions have been left to individual government agencies, often subject to various uninformed pressures. Without benefit of full discussion of the issues, public understanding has remained at a low level and, in consequence, public opinion has drifted perilously close to hysterical insistence upon secrecy at whatever cost. The situation has become so threatening, not only to scientific progress but to traditional American political freedom, that we feel that only through action on your part can the problem be brought under control.

"Therefore, we respectfully urge that you appoint, at your earliest convenience, a Special Commission on Science and National Security. We urge that this Commission be composed of foremost scientists and educators, outstanding men of public affairs, and representatives of Congress, the National Military Establishment, and other agencies of the Executive Branch. We urge that this Commission make a full investigation of the entire problem of security requirements in relation to the requirements for maximum development of science. We believe that the Commission should study, among others, the following questions:

1. What are the limits where excessive attempts at secrecy diminish instead of preserve our national security?
2. What are the areas of science to which security measures can and should be applied?
3. What classification procedures give maximum protection of information of military value with minimum restriction of exchange of information of purely scientific value?
4. To what extent, and under what conditions, should classified research be conducted outside of military laboratories?
5. What types of clearance procedures are effective, and admissible within the bounds of scientific and democratic tradition, in military laboratories, in non-military governmental laboratories, in non-governmental laboratories?
6. What would be the effect on the morale of scientists and on our total scientific program of applying political tests for participation in non-secret scientific work through requirement of (1) oaths and affidavits, or (2) investigation and clearance?
7. What have been the effects of present security measures and procedures on our scientific research programs, particularly in government?

"We believe that the Commission should study these matters, not only with the objective of reporting to you its conclusions and recommendations, but with the thought as well of providing a factual background on security procedures now in use, specific studies of the effects and effectiveness of these procedures, ways in which similar problems are handled in other countries, etc. We have been too long security-conscious with insufficient security education.

"American scientists differ in no way from their fellow-citizens in their desire to protect the best interests of their country. They seek no special dispensations or privileges. In opposing extreme advocates of military security they are really seeking not less security, but more. Our real strength lies not in the guarded knowledge of the moment, but in

our ability to keep in the forefront of advancing knowledge. We recognize that the issue of security vs. freedom of science is one of public policy and that opinions other than those of scientists must enter into its resolution. It is for this reason, and because we are convinced that the matter is of urgent importance, that we ask for the establishment now of a Special Presidential Commission of broad representation and scope."

About People

Hans Staub, professor of physics at Stanford University, has been appointed professor of physics and director of the Institute of Physics at the University of Zurich. Dr. Staub, a native of Switzerland, has been at Stanford since 1938.

Robert C. Parkin, member of the staff of the Council on Medical Education of the American Medical Association, has been appointed assistant professor of clinical medicine and coordinator of postgraduate medical education at the University of Wisconsin Medical School.

W. D. Graham, assistant biochemist in the Division of Poultry Husbandry, Washington State College Agricultural Experiment Station, has joined the staff of the Department of National Health and Pensions, Ottawa, where he will conduct research in antibiotics.

Leslie J. Todd, of the Department of Chemistry at the University of Indiana, has been appointed associate professor of chemistry at Kent State University, Kent, Ohio.

Robert H. W. Strang, consulting oral surgeon and lecturer in orthodontia at Columbia and Temple Universities, has been appointed director of the newly founded Fones School of Dental Hygiene at the University of Bridgeport in Connecticut. The Connecticut State Dental Association recently gave Dr. Strang its Alfred C. Fones medal for his service to the dental profession.

Archie D. Hess, for several years chief biologist of the Health and Safety Department of the Tennessee Valley Authority, and former director of Malaria Control Research, has accepted a commission as scientist in the Reserve Corps of the Public Health Service and has been assigned to the Technical Development Division of the Communicable Disease Center at Savannah, Georgia, as an assistant chief of the division.

A. P. Elkin, professor of anthropology at the University of Sydney, will conduct a review of accomplishments in social anthropology in Papau and Melanesia for the South Pacific Commission. Dr. Elkin will make recommendations on what still needs to be done and assess priorities for further work in the field.

Joseph P. LaRocca, pharmacist at the Naval Research Laboratory, Washington, has been appointed professor of pharmacy at the University of Georgia.

Visitors to U. S.

E. Navajas, entomologist of the Instituto Biologico, São Paulo, Brazil, recently visited entomologists and others in the Smithsonian Institution and the Department of Agriculture.

Walter A. Saborido, president of the Argentine Medical Association and professor of gynecology at the University of Buenos Aires Medical School, recently visited the University of Texas Medical Branch, Galveston, to confer with Willard Cooke, professor of obstetrics and gynecology, and W. W. Nowinski, associate professor of neurochemistry.

Hilda Levi, of the Bohr Institute and the Zoophysiological Laboratory of the University of Copenhagen, is spending six weeks studying autoradiography at the Department of Radiation Biology, University of Rochester School of Medicine and Dentistry. Dr. Levi's study is supported by the Danish Rask-Örsted Foundation and the Rockefeller Foundation. She plans to teach autoradiography in a course on isotope tracers this year at the University of Copenhagen.

Recent visitors who conferred with scientists at the National Bureau of Standards included: **Domingo Albano** of the Argentine Airlines; **Palle Birkelund,** assistant librarian, University Library, Copenhagen, Denmark; **J. Cornelius,** production superintendent, and **A. R. Sloman,** research manager, Associated Pulp and Paper Mills, Ltd., Burnie, Tasmania; **C. C. Gotleib,** of the Computation Centre, McLennan Laboratory, University of Toronto, Canada; **J. N. Mitchell,** professor at the University of Bristol, England; **J. R. H. van Nouhuys,** director of the Fibre Research Institute, T.N.O., Delft, Holland; **J. V. Rao,** engineer at the Public Works Department, Madras, India; **N. S. R. Sastry,** member of the Reserve Bank of India, Bombay; and **John Shone,** member of the London Blood Supply Depot, New Barrett, Herts, England.

Grants and Awards

The University of Illinois College of Medicine has received $15,000 from the U. S. Public Health Service for a study of the effects of the betatron X-ray beam on bone and cartilage. Research will be directed by Roger A. Harvey, of the Department of Radiology, and G. A. Bennett, of the Department of Pathology.

Philip S. Hench and E. C. Kendall, of the Mayo Clinic, Rochester, Minnesota, will receive jointly a **Lasker Award for Administrative and Scientific Achievement** in recognition of their recent studies in arthritis. The $1,000 award will be presented at the 77th Annual Meeting of the American Public Health Association in New York City on October 25.

The Paul-Lewis Laboratories Award in Enzyme Chemistry will be presented to Henry A. Lardy, associate professor of biochemistry at the University of Wisconsin, at the American Chemical Society's Atlantic City meeting in September. Dr. Lardy is receiving the $1,000 award for his recent research on biotin. The society will also honor Agnes Fay Morgan, chairman of the Department of Home Economics at the University of California, who will receive the **Francis P. Garvan Medal** for her studies in nutrition and dietetics.

Meetings and Elections

A Committee on Calorie Requirements, called by the Nutrition Division of the Food and Agriculture Organization of the United Nations (director: W. R. Akroyd), will meet in Washington, D. C., September 12. The committee will consider proposals of the secretariat and members aimed at defining scales of calorie allowances applicable to widely different types of population and conditions. Members of the committee are E. J. Bigwood, professor of biochemistry and nutrition, University of Brussels, Belgium; Ancel Keys, director, Laboratory of Physiological Hygiene, University of Minnesota; R. E. Johnson, until recently director, U. S. Army Medical Nutrition Laboratory, now professor of physiology, University of Illinois; Isabella Leitch, director, Commonwealth Bureau of Animal Nutrition, Rowett Research Institute, Bucksburn, Aberdeenshire, Scotland; Josué de Castro, director, Nutrition Institute, Rio de Janeiro, Brazil; Emile F. Terroine, director of the National Center of Study and Research on Alimentation and Nutrition, Paris, France; Hsien Wu, professor of biochemistry, Berkeley, California; and A. G. van Veen, professor of biochemistry, Biochemical Laboratory, Technische Hoogeschool, Delft, Holland. F. W. Clements, former director, Institute of Anatomy, Canberra, Australia, now head of the WHO Nutrition Section, will also attend the meeting. Jean Mayer of the FAO Nutrition Division will act as technical secretary.

A symposium on brucellosis will be held September 22–23 at the National Institutes of Health, Bethesda, Maryland. The veterinary, public health, clinical, bacteriological, and control aspects of the disease will be discussed. All sessions will meet in Wilson Hall, Administration Building. The symposium is being sponsored by the Bureau of Animal Industry, the National Research Council, and the National Institutes of Health (see *Science*, July 8, p. 56). Inquiries should be addressed to Dr. James T. Culbertson, Executive Secretary, Microbiology and Immuniology Study Section, National Institutes of Health.

The 1949 Conference on Instruments and Measurements and the **International Instruments and Measurements Exhibition,** sponsored by the Royal Swedish Academy on Engineering Sciences and the Association of Technical Physicists of Sweden, will take place in Stockholm September 21–24 and September 22–October 2, respectively. The conference has been arranged in four principal sessions: physical methods in chemical analysis and structure analysis; industrial control (methods); miscellaneous methods of measurements; and apparatus and instruments. Papers are invited and abstracts should be submitted before *September 1* to Y. Axner, Secretary, Kungl. Tekniska Högskolan, Stockholm 26, Sweden. Completed papers must be received by *September 24.* Hotel reservations should be made as soon as possible by letter to Hoteyllbyran, S:t Eriks-Mässan, Stockholm 5.

AEC News

A three-man temporary advisory committee has been set up to recommend ways to establish continuing cooperation between the electric power industry and the AEC. The committee plans to conduct a first-hand study of the commission's reactor program with a view to identifying potential areas of mutual interest to the power industry and the commission and make recommendations for bringing about a continuing program of cooperation in these areas. Committee members are Philip Sporn, president of the American Gas and Electric Company, chairman; Edward W. Morehouse, vice president of the General Public Utilities Corporation in New York; and Walton Seymour, director of the Division of Power in the Secretary's Office, Department of the Interior. It is expected that the survey will be completed and recommendations submitted by March 31, 1950.

On August 2, the third anniversary of the distribution program of radioactive isotopes for use as tracer atoms by U. S. researchers, the **Isotopes Division** announced that a total of 7,613 shipments had been made, for use in science, agriculture, medicine, and industry. Of this total, 7,025 have gone to research laboratories and hospitals in the U. S. Since September 1947, when foreign distribution was announced, 588 shipments, mainly for use in medical and biological studies, have gone to researchers in Argentina, Australia, Belgium, Brazil, Canada, Colombia, Denmark, Finland, France, Iceland, Italy, Netherlands, New Zealand, Norway, Peru, Spain, Sweden, Switzerland, Turkey, Union of South Africa, and the United Kingdom. Countries which are qualified to receive shipments but have not yet instituted orders are Chile, Cuba, Guatemala, India, Ireland, Lebanon, Mexico, and Uruguay.

In response to recommendations of its **Industrial Advisory Group,** the AEC is testing the possibility of selecting, screening, and declassifying information useful to industry without revealing its specific relevance to the atomic energy program. An advisory committee, representing professional societies and the business press, has been appointed and it in turn will recommend members for a small group of workers in the field of metallurgy who, after being cleared, will examine metallurgical information which may be declassifiable. This group will make recommendations of information that might be particularly useful to American industry and any of this information the AEC may declassify will be made available for publication to established metallurgical journals. If the metallurgy program proves effective the procedure may be extended to other fields of technology.

Oak Ridge National Laboratory has developed a relatively inexpensive radioantimony-beryllium neutron source which is now available for U. S. distribution as allocated through the AEC Isotopes Division.

The sources use a core of 32 grams of antimony metal surrounded by a $\frac{3}{16}$-in.-thick beryllium metal cup, the assembly being enclosed in an aluminum jacket. The entire unit is placed in the pile and the antimony activated to the desired level. It has been found that the saturated source will emit a total of about 8

million neutrons per second. A customer will have to make arrangements beforehand to provide a suitable storage space for the source; a lead pig with walls 4 in. thick would probably be sufficient.

Deaths

Neil E. Stevens, 62, professor of botany of the University of Illinois, died June 26 at his home in Urbana. Dr. Stevens was an authority on diseases of small fruits and the distribution of plant diseases, and contributed the comment on disease-free ornamental plants on page 218 of this issue.

Andrey Avinoff, 65, Russian-born entomologist, died July 16 in Doctors Hospital, New York City. Before he left Russia, Dr. Avinoff had made a collection of 80,000 butterflies, which are now in the Leningrad Zoological Museum. He served as director of the Carnegie Museum in Pittsburgh from 1926 to 1945, when he retired as director emeritus.

Roland G. D. Richardson, 71, mathematician and dean emeritus of the Brown University Graduate School, died at his home in Nova Scotia on July 17. Dr. Richardson retired in 1948 after 41 years at Brown. He was secretary of the International Congress of Mathematicians, which will hold its first session in this country next year.

Pedro N. Ortiz, 62, died August 4 at Mount Sinai Hospital, New York City, where he had been senior assistant clinician and advisor on tropical diseases for 12 years. Dr. Ortiz was former Commissioner of Health of Puerto Rico and during his administration established a Bureau of Uncinariasis to carry on the work of prevention and treatment of hookworm begun by Bailey K. Ashford of the U. S. Army Medical Corps.

José Kabigting Santos, 60, retired professor of botany, University of the Philippines, died August 6, at the Quezon Institute, Quezon City, Philippines, following a long illness. Dr. Santos was one of the pioneers in investigating sex inheritance in plants. He was the first president of the Philippine Scientific Society.

Recently Received—

International Conference on the Physics of Metals. (Sponsored by the International Union of Pure and Applied Physics and Netherlands Physical Society. Held in Amsterdam, 12–17 July 1948.) Published by Martinus Nijhoff, The Hague, Netherlands.

Problems of Early Infancy: Transactions of the Second Conference, March 1–2, 1948, New York City. Milton J. E. Senn, (ed.). Available from the Josiah Macy, Jr. Foundation, 565 Park Avenue, New York 21, N. Y. at $1.00.

Speciation in Salamanders of the Plethodontid Genus Ensatina by Robert C. Stebbins. (Univ. California Publs. in Zoology, Vol. 48, No. 6.) University of California Press, Berkeley and Los Angeles, California. $2.50.

Cultural Relations between the United States and the Soviet Union: Efforts to Establish Cultural-Scientific Exchange Blocked by U.S.S.R. (Dept. of State publ. 3480.) Supt. of Documents, U. S. Govt. Prntng. Office, Washington 25, D. C. Price 10¢.

Law and Government of the Grand River Iroquois by John Noon. (Publ. 12.) The Viking Fund, Inc., 14 East 71st Street, New York 21, N. Y. $2.00.

Fatty Acid Antibacterials from Plants by H. A. Spoehr *et al.* (Publ. 586.) Carnegie Institution of Washington, Washington 5, D. C. 50 cents paper, 75 cents cloth.

The Sixth Semiannual Report of the U. S. Atomic Energy Commission, submitted to Congress July 30, is a 203-page summary of the major developments in all phases of the AEC program. Weapons continue to be the central project, and increasing attention is being given to reactor development. But reports on programs in biology and medicine are broader than the others because much of the information in these fields is unrestricted. There are, for example, sections on acute radiation illness and burns, radiation and heredity, medical effects of the explosions over Hiroshima and Nagasaki, radioactive wastes, cancer research, and radiation and agriculture. The report is available under the title *Atomic energy and the life sciences,* from the Government Printing Office for 45 cents.

The Health and Safety Division of the U. S. Bureau of Mines has established a roof control section in an effort to overcome the hazards of falling rock and coal, which kill six times as many miners as explosions do. Headed by Edward M. Thomas, mining engineer, the new section will also study the adaptation of suspension roof support to more general use in mining and will provide consultation services to mine operators.

The Royal Society Scientific Conference: Report and Papers Submitted, PB 98072, a 723-page review of the problems involved in the publication of research, is available at $6.00. Sections of the report are devoted to publication and distribution of reports of original work; abstracting services; indexing and other library functions; and the preparation of reviews, annual reports, and related documents. ***A List of Periodicals and Bulletins Containing Abstracts Published in Great Britain,*** PB 98072-S, has also been prepared by the society's Abstracting Services Consultative Committee, and is available at 80 cents. Both reports may be obtained from the Office of Technical Services, U. S. Department of Commerce, Washington 25, D. C. Checks should be made payable to the Treasurer of the United States.

Make Plans for—

Meteoritical Society, 12th annual meeting, September 6–7, University of Southern California, Los Angeles.

American Congress of Physical Medicine, September 6–10, Netherlands Plaza Hotel, Cincinnati, Ohio.

American Physiological Society, fall meeting, September 14–17, Sheraton Bon Air Hotel and School of Medicine, University of Georgia, Augusta.