as particular situations may require in the public interest.

Since these provisions are contained in the Magnuson Bill, and since other provisions of this bill are, in our judgment, equal or superior to parallel provisions in other proposed bills, we hereby endorse the Magnuson Bill and recommend its enactment. Before this bill is enacted, however, we recommend two additions which are in the nature of safeguards:

1. To insure that the appointments to the board shall be nonpolitical and based upon ability, they should be made from a list of names submitted by the National Academy of Sciences or other national body or bodies of scientists representing all major fields.
2. To protect the freedom of scientists to choose the nature, scope, and methods of their researches, a specific statement for this purpose should be written into the bill.

If a compromise bill is to be worked out, we urge that the provisions named above and the recommendations of Dr. Vannevar Bush in "Science, the Endless Frontier," and in his testimony before the Subcommittee of the Senate, be included in the new bill.

(Signed) A. SIDNEY HARRIS, *Chairman*
A. H. HERSH
FRANK HOVORKA
FREDERICK R. MAUTZ
HARRY GOLDBLATT

REPORT OF GENERAL ARNOLD ON THE NEED FOR MAINTAINING ADEQUATE AIR POWER

IN the report to the Secretary of War of General Henry H. Arnold, Commander in Chief of the United States Army Air Forces, among the recommendations made are the following:

The Air Force must be authorized to expand existing research facilities and create and take advantage of new ones to accomplish applied research and to make such facilities available to scientists and industrial concerns working on problems for the Air Force. Further, the Air Force must have the means of recruiting and training personnel who have full understanding of the scientific facts necessary to procure and use the most advanced equipment. Although basic scientific research should not be undertaken by the Air Force in its own organization, it must encourage and sponsor such basic research as may be deemed necessary for the defense of the nation. We must depend on scientific and technological advances requiring us to replace about one fourth of our equipment each year.

In the accomplishment of its fundamental responsibility for insuring that the nation is prepared to wage effective air warfare, the Air Force must be able to call on all talents and facilities existing in the nation and sponsor further development of the facilities and creative work of science.

It is in the national interest to establish a national research foundation composed of the most highly qualified scientists in the United States and charged with the responsibility of furthering basic research and development in all fields of science and the scientific training of adequate numbers of highly qualified men. Scientific planning must be years in advance of the actual research and development work.

RECENT GIFTS TO THE ARNOLD ARBORETUM OF HARVARD UNIVERSITY

UNDER the provisions of the will of the late Miss Marian Roby Case, the Arnold Arboretum of Harvard University is named as beneficiary to the extent of her real estate, about 90 acres and all improvements, in Weston, Mass., $150,000 to its capital account, and also the residuary legatee for the entire estate. The indications are that this may prove to be the largest single gift to the Arnold Arboretum in the seventy-three years of its existence. Title has already been taken to the real estate involved which adjoins the sixty-acre estate presented to the Arnold Arboretum three years ago by the decedent's sister, Miss Louisa W. Case, together with an outright gift of $50,000 to capital. While no restrictions were specified, the hope was expressed that with the additions to institutional income the two adjoining estates could be maintained and developed as an adjunct to the Arnold Arboretum.

The will of the late Mrs. Katherine T. Balch, wife of the late John Balch, of Milton, Mass., now in probate, provides that the Arnold Arboretum is to be the recipient of one half of her residuary estate, which may amount to more than $100,000.

SCIENCE AWARDS OF THE GUGGENHEIM FOUNDATION

THE John Simon Guggenheim Memorial Foundation has awarded thirty-six post-service fellowships amounting in value to $94,000 to young scholars and artists who have served in the Army and in other Government services. The recipients, each granted approximately $2,500, range from private first class, to lieutenant colonel, and, in the Navy, from specialist third class, to lieutenant commander.

The original appropriation of $200,000 for post-service fellowships, which are granted on the same basis as the other fellowships of the foundation to those who have demonstrated unusual capacity for research and artistic creation, was doubled. This was done because of the high ability of the applicants.

Awards in the sciences are as follows:

Dr. Lewis H. Kleinholz, Captain, Army; instructor, Cambridge (Mass.) Junior College—Studies of physiological and chemical interrelationships in the fields of crustacean endocrinology.

Dr. G. La Verne Freeman, Lieutenant Commander, Navy; associate professor of psychology, Northwestern

University—The preparation of a book on nervous tension in man.

Dr. E. Yale Dawson, Captain, Army; assistant in botany, University of California—Exploration of the Pacific coast of Mexico and Central America for marine algae and the continuation of monograph studies of the marine flora of that region.

Dr. Harold F. Blum, principal biophysicist, Naval Medical Research Institute, Bethesda, Md.—An evaluation of evolutionary concepts, with special emphasis on physiological and environmental aspects.

Dr. Orville T. Bailey, pathologist, Harvard Medical School; War Research under OSRD contract—Studies of the application of physiological methods to problems of degeneration in nerve fibers and myelin sheaths, in correlation with cytological studies.

Dr. Roy Overstreet, assistant soil chemist, Division of Soils, and research associate, Radiation Laboratory, University of California—A study of the absorption and behavior of inorganic ions in plant nutrition by means of radioactive elements and the preparation of radioautographs of the plant tissues.

Dr. George L. Kreezer, associate professor of psychology, Cornell University; staff member, Radiation Laboratory, Massachusetts Institute of Technology—Mathematical analysis of physiological regulatory systems on the basis of physical automatic control theory.

Walter H. Pitts, mathematician; staff member, Radiation Laboratory, Massachusetts Institute of Technology—Studies of the mathematics of the nervous system.

Dr. Britton Chance, assistant professor, School of Medicine, University of Pennsylvania: Doing War Research under OSRD contract—An experimental study of the chemical kinetics of the respiratory enzymes.

Dr. Charles Kittel, physicist; supervisor, Submarine Operations Research Group, Navy—Studies of the theory of the electrical and mechanical properties of matter at microwave radio frequencies.

Dr. Lindsay Helmholz, assistant professor of chemistry, Dartmouth College; chemist working on War Department contract—a study of absorption spectra and structures of solids with the purpose of finding relations that will make possible wider use of absorption data in obtaining information of chemical importance concerning crystals and their constituent atoms or ions.

THE AMERICAN ACADEMY OF TROPICAL MEDICINE

THE twelfth annual meeting of the American Academy of Tropical Medicine was held on November 14 at Cincinnati, Ohio, in conjunction with the Southern Medical Association and the American Society of Tropical Medicine. Dr. E. V. Cowdry, of Washington University, St. Louis, Mo., served as toastmaster. Dr. Mark F. Boyd, Rockefeller Foundation, Tallahassee, Fla., delivered the presidential address. His subject was "International Appraisal of Tropical Medicine." Dr. Louis van den Berghe, of the Belgian Institute of Tropical Medicine, Antwerp, spoke on "The Importance of Tropical Medicine in International Health and Economics."

The following were elected to membership in the academy: Leon A. Fox, M.C., U.S.A.; Clay G. Huff, University of Chicago; Henry Pinkerton, St. Louis University; Paul W. Wilson, M.C., U.S.N., and Willard H. Wright, National Institute of Health, Bethesda, Md.

The following were elected to emeritus membership: R. C. Connor, Charles A. Kofoid, Ernest L. Walker and George H. Whipple.

Officers and councilors elected for the ensuing year are as follows:

President, James S. Simmons, M.C., U.S.A.
Vice-president, George K. Strode, Rockefeller Foundation.
Secretary, Ernest Carroll Faust, Tulane University.
Treasurer, Thomas T. Mackie, M.C., A.U.S.
Councilor (5-year term), L. T. Coggeshall, M.C., U.S.N.(R).
Councilor (3-year term), Karl F. Meyer, Hooper Foundation, San Francisco.

ERNEST CARROLL FAUST,
Secretary

NEWS FROM ABROAD

THE following information has been received by Dr. R. C. Mason, of the Research Laboratories at Pittsburgh of the Westinghouse Electrical and Manufacturing Company, from Dr. H. Brinkman concerning the laboratories of physics in Holland.

. . . In Amsterdam, the Germans stole many instruments, especially the high tension apparatus and the neutron generator tube from the physical institute of Dr. G. T. Sizoo, who is working on radioactive and nuclear physics problems. Some instruments were taken from Leiden, but other university laboratories (Utrecht, Amsterdam, Groningen and the Technical High School at Delft) suffered no permanent loss, as practically all apparatus was concealed in cellars of buildings, churches, etc. The same is true of the research laboratories of the Shell Company at Amsterdam, and the Phillips Company at Eindhoven. The Agricultural High School at Wageningen was heavily looted, and the laboratories of the N. V. KEMA (Electrical Testing Laboratories) at Arnhem were completely looted by the Germans between October, 1944, and March, 1945, at a damage of three million guilders.

More than by material losses the universities and high schools suffered personal losses. Several professors and very many students died in concentration camps or because of their illegal (resistance movement) work. For instance, by execution and concentration camps, 150 students and two professors of the Technical High School at Delft alone died. The Dutch Physical Society lost in that way 16 of its members.

On September 29, we had the first gathering of the