tivities are under the continuing direction of an executive committee, consisting of the chairmen of the seven committees plus key representatives in the Washington, D.C., area. Some of these committees are quite large; for example, the program committee has 79 members and the tours committee, 66. In all, more than 270 American foresters and individuals engaged in forest industries are now helping in the preparations for the congress.

Some 13,000 to 14,000 copies of a preliminary announcement, in five languages, have been distributed to a special mailing list of key forestry agencies and institutions throughout the world. The foreign mailing list now contains more than 1800 names, about six times as many as any previous list. A more detailed information guide covering application for membership, preparation of program papers, plans for programs and tours, and so on, will be issued early in 1960. Meanwhile inquiries concerning the congress may be made to I. T. Haig, Executive Secretary, Organizing Committee, Fifth World Forestry Congress, Department of State, Washington 25, D.C.

Educators Named To Administer National Aptitude Census among High-School Students

The local officials who will administer Project Talent—a plan to test the aptitudes and abilities of a 5-percent sample of U.S. high-school students—were named recently by the administrator of the project, John C. Flanagan of the University of Pittsburgh. The 90 men, most of whom are educators or administrators at colleges and universities throughout the country, are now beginning to arrange with local school officials for the administering of the 2-day battery of tests next March. About half a million students in approximately 14,000 secondary schools will be tested during the study. One of the program's objectives is to take an accurate inventory of the talents of the nation's secondary-school students. A second, and longer range, objective is to correlate test scores of individuals with their subsequent histories, and thus to provide information for use in school counseling. A third objective is to evaluate the effects of such educational practices as accelerated programs for gifted students.

The tests will seek to assess not only a student's aptitudes but also his interests, personality, and achievements, especially in reading and mathematics. In addition, a student will be asked questions about his aspirations, family and community background, and health. Also planned are follow-up studies at intervals up to 20 years from the time of the test. The project, which is financed by the U.S. Office of Education and other government agencies, has been timed to coincide with the 1960 population census. It will be carried out in public, private, and parochial schools in both rural and urban areas. The names of the schools will be announced later this month.

Biological Data Handbook

On 1 September 1959, the *Handbook of Biological Data* office, henceforth to be known as the Office of Biological Handbooks, was transferred from the National Academy of Sciences–National Research Council to the Federation of American Societies for Experimental Biology. A new Committee on Biological Handbooks, responsible for policy, has been selected; its chairman is Raymund L. Zwemer of the science adviser's office in the Department of State.

The committee has approved the preparation of a tabular compilation on "Composition of Blood and Body Fluids," which is to be completed in the autumn of 1960. Then work will begin on a handbook on growth. Additional projects were discussed at the first meeting of the committee, which was held on 16 November in the *Handbook* office in the Dupont Circle Building, 1346 Connecticut Ave., NW, Washington, D.C.

Navy Surveys Basic Research

A Navy study of basic research that was released last fall outlines the characteristics of such research in industry, government, and universities and reports some significant facts. After emphasizing that basic research investigators "are exceedingly rare in number," the report points out that most of them have doctoral degrees, although only 2 percent of the nation's college graduates continue their education through the doctoral level. Of this 2 percent, only about one in five remains in basic research work. Studies indicate that not more than half of these have the outstanding talent necessary for the creative work of basic research and that this half produces 80 percent of the scientific output. At present the United States has about 27,000 basic research scientists, according to the survey; therefore, about 13,500 investigators are producing the country's principal research results.

The leading corporations in the United States are investing an increasingly large proportion of their research and development budgets in basic research, in some cases as much as 20 percent. The report states that the majority of the research directors interviewed for the study thought that some 15 to 20 percent of the Navy's research and development budget should be allocated for basic research. At present the ratio is 6 to 8 percent.

The 2-year study was conducted for the Naval Research Advisory Committee by Arthur D. Little, Inc., of Cambridge, Mass. Headed by Guy Suits, vice president and director of research for the General Electric Company, the committee is the Navy's top advisory group on research. Copies of the two-volume survey may be obtained from the Office of Technical Services, U.S. Department of Commerce, Washington 25, D.C.

Summer Institutes Announced for High-School and College Teachers

Funds will be available in 1960 to help about 18,000 high-school and college teachers of science, mathematics, and engineering to participate in 379 summer institutes sponsored by the National Science Foundation. Grants totaling more than $21 million will be awarded to support the institute program in 265 educational institutions located in the 50 states, the District of Columbia, and Puerto Rico.

Some 316 of the institutes will be open to high-school teachers only, 37 will be for college teachers only, 24 will be for both high-school and college teachers, and two will be for technical-institute personnel. Approximately 16,000 high-school teachers and 2000 college teachers will participate, with the aid of NSF.

The success of previous summer institutes has contributed greatly to the growth of the program. The first two summer institutes supported by the National Science Foundation were held in 1953. The number has grown each

summer: 125 in 1958, 350 in 1959, and 379 in 1960.

Seventeen institutes offering courses in radiation biology for high-school teachers, and five similar institutes for teachers in small colleges, are being jointly sponsored by the foundation and the Atomic Energy Commission, as are three institutes in isotope technology for college teachers.

The number of teachers who will receive financial support in each of the 379 institutes will average nearly 50 and will vary from 15 to more than 100. Tuition and fees will be paid for these teachers. They will also receive stipends of not more than $75 per week for the duration of the institute, plus allowances for travel and dependents. The institutes will vary in length from 4 to 12 weeks.

Participants will be chosen by the institutes themselves, not by the National Science Foundation. Inquiries should be addressed to directors of the individual institutes, who are named in a list that has been prepared by the foundation.

News Briefs

The Public Health Service has announced the transfer of its Division of International Health from the Bureau of State Services to the Office of the Surgeon General. H. van Zile Hyde, assistant to the surgeon general for international affairs, will be chief of the division, which he also headed from 1955 to 1958. Horace DeLien, who has served as chief of the division since September 1958, has been assigned to the American Embassy in Paris as medical officer in charge of quarantine activities, European area.

The division's international education and exchange program will remain in the Bureau of State Services as part of the Division of General Health Services, which administers the Public Health Service's training program for public health workers in this country.

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Regular exchanges between lecturers and research workers of Canada and the Soviet Union are to start next year, according to the official Soviet news agency Tass.

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The National Bureau of Standards is expanding its low-temperature research in order to increase the precision of temperature calibrations in the range from 90° down to 20°K, and to provide a calibration service covering temperatures from 20° down to 2°K. Steps will also be taken toward establishing fixed points and extending the International Temperature Scale below 90°K, where there is now no international agreement.

Scientists in the News

Wallace R. Brode, science adviser to the Secretary of State, has won the American Chemical Society's 1960 Priestley Medal—the highest honor in American chemistry. The medal will be presented at the American Chemical Society's 137th national meeting in Cleveland in April.

Michael Polanyi of Oxford University has been selected as the 1959 winner of the Lecomte du Noüy Award. The award was given in recognition of Polanyi's books, *Personal Knowledge* and *The Study of Man.*

Harold S. Morton and **Eugene L. Nooker,** staff members of the Applied Physics Laboratory of Johns Hopkins University, each received the Navy's Distinguished Public Service Award, presented by Rear Admiral M. H. Hubbard, chief of the Navy Bureau of Ordnance, at ceremonies on 23 November. They were cited for their contributions in the field of missile warheads.

Albert M. Potts, formerly at Western Reserve University, has been appointed professor of ophthalmology in the department of surgery and director of research in ophthalmology at the University of Chicago.

William T. Marshall, Regius professor of civil engineering at the University of Glasgow, has been appointed visiting professor in civil engineering at Northwestern University for a 9-month period beginning 1 January.

J. Herbert Taylor, professor of cell biology, Columbia University, will discuss nucleic acid synthesis and chromosome duplication as a Sigma Xi national lecturer at a number of colleges and universities during January 1960.

Herbert S. Goldberg, on sabbatical leave from his duties in the department of microbiology, University of Missouri, is doing research at the Low Temperature Research Station, University of Cambridge, England.

Joseph Chatt of the Akers Research Laboratory of Imperial Chemical Industries Ltd., England, has been appointed distinguished visiting professor in the department of chemistry of Pennsylvania State University for the spring semester of 1960. He will lecture on the chemistry of organometallic compounds, carbonyl, hydrocarbon and hydrido complexes, and the coordination compounds of the tertiary organic phosphines.

Robert B. Woodward, Morris Loeb professor of chemistry at Harvard, has been awarded the Davy Medal of England's Royal Society. The medal is awarded annually for "the most important discovery in chemistry in Europe or Anglo-America."

Recent Deaths

John Anderson, Altadena, Calif.; 83; astronomer at California Institute of Technology who was executive officer of the institute's observatory council, 1928–48; supervised construction of the 200-inch Hale telescope at Mount Palomar; 2 Dec.

Arpad Berczeller, West New Brighton, N.Y.; 55; head of the bacteriology department of Sea View Hospital, West New Brighton, and specialist in tuberculosis drugs; prewar head of the department of bacteriology at the Pasteur Institute in Paris; 28 Nov.

Janet W. Mackie, Washington, D.C.; 66; specialist in tropical medicine who retired last year from the U.S. Public Health Service; taught at the Wake Forest Medical School; 24 Nov.

Charles C. Macklin, London, Ontario; 76; retired professor of histology and embryology at the University of Western Ontario Medical School.

Walter J. Murphy, Washington, D.C.; 60; editorial director of the American Chemical Society's journals in applied chemistry and director of the society's news service; 26 Nov.

Harold S. Palmer, Honolulu, Hawaii; 69; professor emeritus of geology at the University of Hawaii; 24 Oct.

John V. Starr, Cranford, N.J.; 57; chemist and management official with the Esso Standard Oil Company for 31 years; 6 Dec.

Richey L. Waugh, Arlington, Mass.; 71; former chief of surgical service of the U.S. Public Health Service Hospital, Boston, and former teacher of orthopedics at Tufts University Medical School; 24 Nov.