

Space Administration Establishes Bioscience Advisory Committee

A Bioscience Advisory Committee has been established by the National Aeronautics and Space Administration. The committee will study current United States capability in space-orientated life-science research and development; outline the scope of present and future problem areas in the space bioscience field; and then recommend the part NASA should play in future bioscience activity related to the space program.

Seymour S. Kety, chief of the Laboratory of Clinical Science, National Institute of Mental Health, is chairman of the new group, which has the following bioscientist members: Wallace O. Fenn, professor of physiology at the School of Medicine and Dentistry, University of Rochester; David R. Goddard, director of the division of biology, University of Pennsylvania; Donald G. Marquis, professor of psychology at Massachusetts Institute of Technology; Robert S. Morison, director of medical and natural sciences, Rockefeller Foundation; and Cornelius A. Tobias, professor of medical physics, University of California, Berkeley. Clark T. Randt, NASA scientist for space medical research, has been appointed executive secretary of the committee.

Union List of Abstracted Periodicals

Among the first projects initiated by the newly established National Federation of Science Abstracting and Indexing Services is the compilation of a union list of periodicals covered by the major U.S. abstracting and indexing services. The planned list will indicate for each periodical: title, author (if a series), country, language(s), name of service providing coverage, and type of coverage—that is, complete, partial, or monitored; abstracts, critical reviews, or indexes only.

At present, more than 10,000 scientific serials are being received by U.S. libraries. Many of these are abstracted, wholly or in part, by several major or minor abstracting or indexing services; others are probably not being abstracted by any service. The preparation of the list will enable the abstracting services to determine: (i) where duplication of coverage exists and whether such duplication could or should be avoided; (ii) where certain periodicals can be obtained by loan, or where photocopies of specific

articles can be obtained; and (iii) what gaps exist in over-all or specific coverage.

Made possible by a National Science Foundation grant, this initial list is considered a first step toward a more comprehensive listing. It will not be formally published but will be mimeographed for use by abstracting and indexing services and other interested groups. Additional information may be obtained by communicating with Mr. Raymond A. Jensen, Executive Secretary, National Federation of Science Abstracting and Indexing Services, 301 E. Capitol St., Washington 3, D.C.

Senate Committee Approves U.S. Participation in Century 21

Federal participation in the Century 21 Exposition in Seattle, Wash., in 1961 and 1962 won the approval of the Senate Foreign Relations Committee in a recent vote taken in executive session. Senator Warren G. Magnuson (D-Wash.) and Senator Henry M. Jackson cosponsored the legislation under consideration.

The proposed program calls for some 14 agencies of the federal government to exhibit their scientific accomplishments at the 18-month science, culture, and industrial fair, an international event that will have the theme "Man in Outer Space." The exposition is being sponsored by the city of Seattle and the state of Washington, which have so far put up some \$30 million in building, property, and operating funds.

The House Committee on Science and Astronautics already has approved a \$12.5 million program for federal participation in the exposition. The Senate version of the bill provides for "such funds as may be necessary."

Radar Telescope

A radar telescope with a parabolic reflector 142 feet in diameter is under construction at Stanford University. It will be completed in about a year. This will be the largest radar telescope in the United States and the second largest in the world. The transmitter will operate in the frequency range from 20 to 60 megacycles per second; it will be the most powerful ever built in this frequency range.

The project was announced recently by scientists of Stanford University and the Stanford Research Institute. It will be a joint undertaking by SRI's Com-

munication and Propagation Laboratory and the university's Radio Propagation Laboratory, with support from the Air Force Cambridge Research Center.

Usually radio telescopes are equipped to receive only naturally occurring electromagnetic radiation from the cosmos. With the high-powered transmitter it will be possible to transmit signals to nearby planets, such as Venus. This technique is becoming increasingly important in studies of the solar system. The Stanford group will attempt to obtain radar echoes from Mars and from the sun itself. This technique is called "radar astronomy," to distinguish it from "radio astronomy," which involves only reflection of natural radiation.

Some of the data the group expects to obtain are more accurate measurements of cosmic distances; data on the surface of the moon and planets; the rotation speed of Venus; ionization density and ion distribution in the sun's outer corona and around various planets; and data on the amounts and movements of ionized gases and space debris between the earth and the moon, and in interplanetary space.

Emigration of the Intelligentsia

Among the persons arriving as Soviet zone refugees at the emergency transit camp of Berlin-Marienfelde (West Germany) during the first 6 months of this year were 455 university professors and teachers from various types of schools, 443 engineers and technicians, and 161 physicians. The Bonn government's overseas information paper, *The Bulletin*, said of these refugees:

"Many of them not only held high, well-paid positions but also enjoyed other privileges not granted the average subject of the Soviet zone régime, since this régime hopes by especially good treatment to prevent the emigration of the intelligentsia.

"Nevertheless, the tendency to flee westward has increased among members of the very professions favored by the authorities and the Communist Party."

The Bulletin stated further that at Soviet zone universities many professorial chairs are no longer filled, and at hospitals there is a lack of specialists. The University at Halle-Wittenberg is cited as having lost 77 instructors to the West in the period from May 1958 to May 1959, and in a year the Dresden Medical Academy is said to have lost 10 percent of its staff, 17 of them specialists or senior staff members.