

conjunction with highly sensitive receivers, which scan the frequency range from 100 to 600 megacycles at the rate of 10 times per second. This solar radio-telescope will be the first of its type in the country. The equipment will be placed in operation at the Upper Air Research Observatory at Sacramento Peak, N.M., in the early part of 1956. This observatory, which is a joint scientific operation by Harvard and the Air Force, is now devoted largely to optical observations of the sun with coronagraphs and other specialized optical instruments.

Construction of the new radiotelescope has been made possible through financial support extended by the Geophysical Directorate of the Air Force Cambridge Research Center. Henry Jasik, consulting engineer of Mineola, N.Y., will serve as electronics consultant to the project.

The astronomer-in-charge of the new telescope will be Alan Maxwell, recently of the Jodrell Bank Experimental Station of the University of Manchester, England. He joined the Harvard College Observatory staff in August. Richard N. Thomas, of the observatory staff, will direct the scientific project in conjunction with Menzel.

■ A special advanced course in theoretical problems of microwave physics will be offered by the California Institute of Technology this coming year for the benefit of the institute's Industrial Associates. The new course, which will be conducted by Charles H. Papas, associate professor of electrical engineering, was inspired by the interest of Industrial Associates representatives who attended a series of seminars on antenna theory held at C.I.T. last fall. The institute does not ordinarily offer courses for industry.

■ The University of Maryland issues an unusual periodical, *The Barker*, which is published bimonthly by Arnold W. Kellner, Sr., manager of the animal farm at the university's school of medicine. The 4-page mimeographed newsletter is distributed to the employees of the animal farm, to science teachers in the Baltimore schools, and to interested employees at the university. *The Barker* first appeared in March of this year as a 3-page mimeographed letter. Subsequent issues have been a page larger.

Contents of the publication vary from a long story—continued through two issues—about how Baltimore met the problem of supplying research dogs from the municipal pound, to helpful hints on animal care. The first issue carried an invitation to visit the animal farm daily from 10 A.M. to 4 P.M., without appointment except for large groups.

■ Lehigh University will dedicate its new Fritz Engineering Laboratory on 14 Oct. The building consists of a seven-story section 130 feet by 70 feet and a four-story section 114 feet by 24 feet. The main test bay of the new building measures 50 feet by 130 feet. It houses a 5-million-pound testing machine that is serviced by a 20-ton crane 65 feet overhead.

■ The teaching of psychiatry has been expanded at the University of Oklahoma School of Medicine with the appointment of two more full-time psychiatrists and the opening of the first 20 of 60 neuropsychiatric beds at University Hospitals. Although the neuropsychiatric areas were built 3 years ago, it was not until this year that the legislature appropriated moneys to start operating the in-patient services.

With the opening of the 20 beds in August and the use of 114 affiliated beds at the Oklahoma City VA Hospital, the training of the first four psychiatric residents is under way. The psychiatric out-patient service, which has been in operation for many years, will continue to expand as more beds are opened.

The two new appointees are Donald C. Greaves, who has been attending psychiatrist at the Payne Whitney Clinic in New York, and John Gussen, formerly of the Karoline University Hospital, Stockholm, Sweden. Greaves was appointed associate professor of psychiatry, and Gussen an assistant professor.

■ New York University is erecting a 300-foot weather study tower at Indian Point in Buchanan, N.Y. This tower represents the first step in the construction of an electric generating station by Consolidated Edison. The proposed \$55-million station will use fuel oil, as well as the fission of atoms, to generate electricity.

Consolidated Edison has contracted with the research division of N.Y.U.'s College of Engineering for a 1-year study of local weather conditions. The study will determine the necessary height of the plant's stack to prevent pollution in the vicinity.

■ Cornell University is establishing a biological and conservation station at Shackleton Point on Lake Oneida, N.Y., on a 400-acre estate bequeathed to the university by an alumnus, Charles S. Brown, Syracuse engineer and inventor who died in 1953. Gustav A. Swanson, head of Cornell's conservation department, will be responsible for developing the station, and Edward C. Raney will direct its scientific program.

The area is an exceptionally rich one for work in biology and conservation. Research projects have begun, and plans for summer classes and extension experiments and demonstrations are under

way. Cooperating with the State Conservation Department, the university expects to develop a series of ponds to attract even more wildlife and for pond fisheries studies.

■ Rensselaer Polytechnic Institute and Raytheon Manufacturing Co., Waltham, Mass., have jointly announced the initiation of a cooperative education plan. Under this plan selected electrical engineering students will be given assignments in Raytheon's laboratories and factories so that they may parallel their academic pursuits with actual work in their chosen field. The program will lead to a bachelor's degree.

Grants, Fellowships, and Awards

■ During the year June 1956 to June 1957 the Office of Naval Research will continue its program in support of basic research in astronomy and astrophysics. As in past years, an advisory committee of seven astronomers nominated by the Council of the American Astronomical Society will aid ONR in evaluating proposals received. At present the membership of this committee is as follows: O. C. Wilson, *chairman*, B. J. Bok, J. W. Evans, G. C. McVittie, A. B. Meinel, J. J. Nassau, and K. Aa. Strand.

Proposals for research to be undertaken should be addressed to the Chief of Naval Research, Department of the Navy, Washington 25, D.C., Attention: Code 430. Ten copies will be required and, if possible, a letter of approval from the institution at which the work will be performed. These should be received *not later than 15 Dec.*

■ During the coming school year, 140 students throughout the nation will share awards totaling \$10,000 in the 5th annual program of Science Achievement Awards. The program is conducted by the Future Scientists of America of the National Science Teachers Association. The contest is open to all students in grades 7 through 12 in public, private, and parochial schools. Awards consisting of U.S. Savings Bonds, gold pins, certificates, and school trophy plaques will be given for outstanding projects. Honorable mention awards will be granted to several hundred additional students. Equal awards will be given in each of eight geographic regions. The National Association of Secondary-School Principals has placed this contest on the Approved List of National Contests and Activities for 1955-56.

Any project—for example, an investigative problem, library research, model building—in general science, biology, chemistry, physics, or any field of science or mathematics at any grade level (7

through 12) is eligible for entry. Special national awards will be given for projects that deal with metals or metallurgy. Project reports must be mailed to regional chairmen *not later than 15 Mar.*

The Science Achievement Awards program is sponsored by the American Society for Metals. To participate, students are expected simply to complete and report on a science or mathematics project; there are no tests to take and no essays to write. Awards are designed to give recognition for individual student activity and accomplishment and to encourage students to consider careers in science and engineering.

Additional information and student entry forms may be obtained from the Future Scientists of America, National Science Teachers Association, 1201 16 St., N.W., Washington 6, D.C.

■ The National Vitamin Foundation invites individuals who hold doctoral degrees in medicine or one of the biological sciences and who are interested in continuing their training in the science of nutrition to become candidates for the second Russell M. Wilder fellowship. This fellowship was created by the foundation to honor Russell M. Wilder of the emeritus staff of the Mayo Clinic.

The fellowship is for 3 years and pays the recipient \$4500 the first year, \$5000 the second, and \$5500 the third year. It becomes effective on 1 Jan. 1956. Application forms can be obtained from the offices of the National Vitamin Foundation at 15 E. 58 St., New York 22. Candidates must mail their completed application forms to the foundation *before 15 Oct.*

■ The Sears Roebuck Foundation has announced a \$125,000 grant to assist newly practicing physicians. The plan was started by the foundation in cooperation with the American Medical Association as "an investment in individual incentive."

Physicians seeking to establish practices but unable to get full local financing will be offered unsecured 10-year loans up to \$25,000 each. At least one loan in each of five regions across the country will be given this year.

The foundation states that "This is a plan aimed at creating the financial and managerial conditions best designed to satisfy the medical needs of the American people, the professional and economic needs of the American physician, and the principles of free, voluntary and unregimented practice of medicine in which the physician is beholden to no 'boss' other than his professional ethics and his professional competence."

The plan will be self-expanding, with all repayments and contributions going for further grants. Thus, every grant

made will help to establish another medical practice where needed.

Applications for grants will be screened by a medical advisory board, which has been appointed from nominations by the AMA board of trustees. A request for a grant will be considered on the basis of need for assistance, expected use, and effort and thought by the applicant in the understanding and solution of his own problems.

Physician placement offices of state medical societies will play a major role in getting the program started. The foundation has pointed out that the plan is experimental, and that its continuation after 1955 will depend on the reception and support provided by the medical profession.

Applications must be sent to the office of the region in which the proposed medical practice is to be established. They should be addressed to the director, Sears Roebuck Board, at these locations: Pacific Coast region—2650 Olympia Blvd., Los Angeles 54, Calif.; Southwest—1409 South Lamar St., Dallas 2, Tex.; Midwest—8 E. Congress St., Chicago 5; South—675 Ponce de Leon Ave., Atlanta, Ga.; East—4640 Roosevelt Blvd., Philadelphia 32, Pa.

■ Graduate training in preventive medicine and public health will be offered, starting in 1956, to physicians from four Central American countries under a scholarship program sponsored by the United Fruit Co. at the Harvard University School of Public Health. Scientists from Costa Rica, Guatemala, Honduras, and Panama will receive awards that will provide tuition, or tuition plus maintenance and travel expenses, depending on individual needs.

In subsequent years, United Fruit Co. may broaden the scope of the program to include other countries where the firm has operations. The opportunities, in the future, may also be extended to individuals trained in related health disciplines such as nursing and sanitary engineering.

On completion of a year's training, the scholarship fellows will be eligible for one of the following degrees: master of public health, master of science in hygiene, or master of industrial health. In exceptional cases provision may be made to renew the scholarship for a second year of study that leads to the award of either the degree of doctor of public health or doctor of science in hygiene.

Two scholarships are being offered for the first year of the program. Candidates must return completed admission and scholarship applications *by 1 Jan. 1956* to the Harvard School of Public Health, 55 Shattuck St., Boston 15, Mass.

In the Laboratories

■ The nation's first installation of compatible color television for hospital use will be made by Radio Corporation of America at the Walter Reed Army Medical Center, Washington, D.C. The comprehensive installation will provide complete color television systems for use by the Armed Forces Institute of Pathology, the Walter Reed Army Hospital, and the Army Medical Service Graduate School.

■ The Chicago Apparatus Co., Chicago, Ill., has acquired the A. J. Griner Co. of Kansas City, Mo., and its subsidiary in Wichita, Kans. The two Griner companies will retain their present names.

■ Further expansion of the Atomic Energy Commission's Rocky Flats, Colo., plant by construction of two new buildings and related facilities and by modification of three existing buildings has been announced. The new facilities, modification, and equipment will cost approximately \$13 million. Preparatory work will begin in a short time and completion is scheduled for early 1957. The Dow Chemical Co. of Midland, Mich., operates the Rocky Flats plant for the AEC.

■ The Gulf Oil Corp. has announced plans for a nuclear science laboratory to be located at the company's research center in Harnarville, Pa. Principal unit in the new facility will be a 3-million-volt Van de Graaff particle accelerator. The unit will be installed on approximately 1 Sept. 1956.

■ A human centrifuge for studying acceleration stresses of jet pilots, the second of its kind in Europe (there is one at Farnborough, England) has recently been established at the Karolinska Institutet, Stockholm, Sweden. An account of the centrifuge was published in a recent issue of the *ASEA Journal*, house organ of the Swedish ASEA Co., which designed and built the device.

Miscellaneous

■ Publication of vol. 1, No. 1, of a new periodical, the *Journal of Electronics*, has been announced by Academic Press, Inc., which will distribute the journal in the United States and Canada. This new English-language journal will serve as a forum for electron physicists, solid state physicists, chemists, and engineers; it will contain accounts of both theoretical and experimental work.

J. Thomson of the Royal Naval Scientific Service will act as editor, and N. F. Mott, a professor and fellow of the Royal Society, will be the consulting