to encourage study and research in engineering and science related to communication technology. Each fellowship is for one year and carries a grant of $2000 for the fellow and another $2000 for tuition, fees, and other costs of the academic institution that he selects for his study.

■ A $10-million program of grants to the National Fund for Medical Education has been announced by the Ford Foundation. The appropriation is intended to assist the National Fund for Medical Education in its efforts to strengthen the financial support for medical schools, both public and private, throughout the United States and to develop new sources of such support.

Grants from the $10-million appropriation will be paid to the National Fund on a matching scale in a program that could last up to 10 years but might be accelerated to completion in 5 years, depending on the rate at which the National Fund develops additional support for medical education. The maximum grant in any one year would be $2 million.

The sliding formula by which the Ford Foundation will match the National Fund's receipts is designed to give particular encouragement in the early years of the plan to increasing the contributions of existing donors and to attracting new donors. In 1955 the National Fund raised approximately $2,147,000 in unearmarked funds for distribution to the nation's medical schools. If the fund's receipts are of equal magnitude in 1956, the fund would receive under the Ford Foundation's formula grants totaling 70 percent of this amount, or $1,503,486. All contributions to the National Fund in excess of the 1955 total would be matched dollar for dollar, subject to the annual maximum of $2 million.

In the Laboratories

■ Missile research with shock waves simulating flight problems at speeds exceeding 18,000 miles an hour is being conducted at the Avco Research Laboratory, a unit of Avco Manufacturing Corporation's Advanced Development Division, at Everett, Mass. The high speeds, accompanied by 15,000°F temperatures, are achieved in several shock tubes, one of which is a large tube that is believed to be the biggest research device of its kind. The research at Avco is being conducted for the Air Force.

■ The U.S. Atomic Energy Commission has announced that it has signed a contract with Atomics International, a division of North American Aviation, Inc., for the construction and operation of an experimental reactor project to be known as the organic moderated reactor experiment. The work will be conducted at the National Reactor Testing Station in Idaho at an estimated cost of $1.8 million, of which approximately $750,000 will be borne by the company.

The experiment, which is part of the commission's civilian power reactor development program, is designed to establish the technical feasibility of using the hydrocarbon diphenyl as reactor moderating and cooling material. The use of organic compounds such as diphenyl has several potential advantages, among which are low induced radioactivity, low corrosion of fuel elements, and high boiling point, which makes reasonably high-temperature systems possible.

The experiment will carry forward research previously done for the AEC by the company. It will simulate the conditions of heat transfer, temperature, and coolant flow that would exist in a practical power reactor.

The reactor will be designed to generate 5000 to 15,000 kilowatts of heat. It will use fuel elements highly enriched in uranium-235. Construction will begin this year and the reactor is expected to begin operating early in 1957.

■ The Navy and the Glenn L. Martin Company of Baltimore, Md., have announced that the Vickers Electric Division of Vickers Inc., a unit of Sperry Rand Corporation, has been selected to design and manufacture the magnetic amplifier auto-pilot unit that will control the flight of the launching vehicle that will be used for the man-made satellite that is to be launched during the International Geophysical Year.

■ The Nuclear Science and Engineering Corporation, Pittsburgh, Pa., has built an additional laboratory. This expansion reflects the organization's growing program in radiobiology. Abraham Edelmann, manager of the department of biology and medicine, moved his operations to the new building on 1 Apr., where he is continuing to direct work in radiation sterilization of food, radiation sterilization of sewage, study of radiation effects on living organisms, irradiation induced toxic factor, health-physics determinations, and other programs related to nuclear aspects of biology and medicine.

■ The Air Force and the General Dynamics Corporation's Convair Division have jointly announced that Convair's Fort Worth, Tex., plant has been awarded a contract to develop an airframe for a nuclear-powered plane.

■ The Air Force and the Lockheed Aircraft Corporation have jointly announced plans to erect aircraft facilities on a large site near Dawsonville, Ga. The facilities will be owned by the Government and operated by Lockheed in connection with the program to develop nuclear-powered aircraft. Lockheed last December announced that preliminary design studies on nuclear aircraft would be conducted at its Georgia Division at Marietta.

Miscellaneous

■ A new source of research information in many fields of industrial interest, the Naval Research Laboratory's monthly *Report of NRL Progress,* is now available to the public for the first time. The Office of Technical Services, U.S. Department of Commerce, will handle distribution of the publication. Each issue contains articles and "problem notes" concerning NRL nonclassified research and development.

■ The Association for Applied Solar Energy has announced the publication of the proceedings of the World Symposium on Applied Solar Energy, which was held last November in Phoenix, Ariz. First distribution is to the 800 registrants to the symposium. The 300-page publication contains 30 papers by internationally recognized specialists. It may be obtained by sending $5 to the secretary for the Association for Applied Solar Energy, Mr. John I. Yellott, 204 Heard Building, Phoenix, Ariz.

■ The Naval Research Laboratory has more than 40 openings for scientists and engineers for the earth satellite program. The positions are in electronics, physics, mathematics, and engineering and range in grade from GS-5 through GS-13. For information, write to Dr. W. G. Torpey, Personnel Officer, Naval Research Laboratory, Washington 25, D.C.

■ Thomas D. Nicholson of the American Museum–Hayden Planetarium describes the solar eclipse activities in Ceylon during 1955 in the lead article of the May issue of *The Scientific Monthly.* Other articles include "Physics and metaphysics" by Max Born, "Mathematicians at Ticonderoga" by D. J. Struik, "Population movements in the southern United States" by Homer L. Hitt, "The sun's energy" by Farrington Daniels, "Acid-base terminology" by Thomas P. Nash, Jr., and "Radioactive methods for geologic and biologic age determinations" by Otto Hahn. A brief description of the new AAAS headquarters building in Washington, announcement of the AAAS socio-psychological prize for 1956, and the AAAS sections call for papers for the New York meeting, along with reviews of 13 books, complete the issue.