

PROGRAMS AND FACILITIES

New Space Study Institutes

NASA, the National Aeronautics and Space Administration, is establishing a theoretical research group (the Goddard Institute for Space Studies) in New York City. Attached to the Theoretical Division of the Goddard Space Flight Center, located near Washington, D. C., the group in New York will be under the direction of Robert Jastrow, who will also retain his present position as chief of the Theoretical Division at the Space Flight Center. The staff of the new Institute will number about fifty, drawn nearly equally from the disciplines of astronomy, physics, and the earth sciences, and will be aided by scientists from nearby universities, a number of whom have already agreed to accept appointments as part-time consultants.

Goddard Space Flight Center is currently sponsoring a program of research associateships designed to permit scientists from the United States and abroad to carry out experimental and theoretical research on problems related to NASA space-science activities. This program is administered by the National Academy of Sciences—National Research Council, which reviews applications and makes the appointments. It is expected that these associateships will also be available for theoretical research in the New York Institute.

The Institute will begin formal operations in May on a limited basis, and a full program is expected to be under way by September. Research areas of major interest will include the structures of the earth, the moon, and other planetary bodies in the solar system,

as well as the atmospheres of the earth and other planets, the properties of the interplanetary plasma, sun-earth relationships, the origin and evolution of the solar system, astrophysics, and celestial mechanics. The program also provides for the organizing of several seminars by senior staff members and university consultants. These will begin with an introductory formal lecture series of two to six weeks' duration, and in most cases will be continued thereafter as a year-long program of lectures. Subjects and lecturers for the seminars thus far arranged include Gravity and Relativity (R. Dicke), Astrophysics (B. Strömberg), Origin and Evolution of the Solar System (H. C. Urey, initially), Plasma Physics (H. Lewis), Fluid Dynamics (R. Kraichnan). A seminar is also planned in celestial mechanics, but arrangements have not yet been made for its organization. In addition, J. W. Chamberlain of Yerkes Observatory expects to give a series of lectures on the physics of the upper atmosphere during a visit planned for the spring term.

The University of Alabama has opened a science-research institute in Huntsville in cooperation with the Marshall Space Flight Center of the National Aeronautics and Space Administration and the Army Ordnance Missile Command. Basic research services in problem areas encountered at the Space Flight Center and the Missile Command will be provided at the new institute, which is expected to prove of major importance to the University in expanding and improving its research and graduate programs in the sciences.

F. H. Mitchell, professor of physics at the University, has been appointed interim director. The new institute will be housed in the University of Alabama Building which was recently completed in Huntsville.

NBS Advisory Groups

Two new technical advisory committees have been established by the National Bureau of Standards, one on calibration and measurement services, and the other on engineering and related standards. William Wildhack, special assistant to the director of the Bureau, is chairman of both committees.

The Advisory Committee on Calibration and Measurement Services will advise the Bureau concerning current and anticipated needs of industry for measurements and calibration services. In announcing the committee's creation, NBS termed it an outgrowth of the tremendous increase in measurement and calibration activity in the military services and in private industry, particularly the "space-age" industries, along with the computer, microwave-component, and electronic industries. As a step towards answering the resulting needs for improved calibration and measurement facilities



R. Jastrow, who will head NASA's Goddard Institute for Space Studies in New York.

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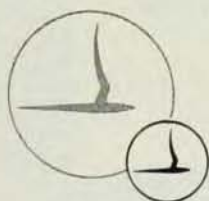
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Cornell Aeronautical Laboratory is currently conducting a research problem involving the study of gaseous electronics and the physics of ionized gases. Of particular interest are theoretical and experimental studies of the interactions between ion species, electrons, and neutral molecules in ionized gases, as well as plasma dynamics.

Inquiries are invited from those interested in formulating and conducting research problems in these fields. Graduate degrees in physics are necessary, with related experience preferred. Liberal industrial level salary scales plus cost of living increments and many fringe benefits are provided. The Laboratory's professional prospectus, "A Community of Science," is available upon request. Please address J. T. Rentschler.

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ties, standards laboratories have increased in size and numbers throughout the military services and the industries involved. These laboratories perform secondary calibration services, while NBS provides master standards for calibration and serves to guide and assist industry and the military in improving their own standards operations. The nine committee members, appointed by NBS Director Allen V. Astin and nominated by industrial groups, were selected on the basis of their broad personal knowledge of the measurement problems in particular segments of industry. They are C. H. Brumley of Bausch & Lomb, W. J. Darmody of the Sheffield Corporation, L. H. LaForge, Jr., of Sylvania Electronics Systems, H. C. Biggs of the Sandia Corporation, E. J. Brazill of the Martin Company, A. J. Woodington of Convair Astronautics, W. G. Amey of Leeds & Northrup, I. G. Easton of General Radio, and L. B. Wilson of Sperry Gyroscope.

The Advisory Committee on Engineering and Related Standards will concern itself with national needs for such standards as codes, specifications, standard test methods, and standard data on the properties of engineering materials. It will also foster cooperative programs and will recommend uses of the Bureau's special competence for the development and application of engineering and related standards. The American Standards Association and the American Society for Testing Materials each nominated three of the six members of the committee. The Standards Association is represented by J. R. Townsend of the Department of Defense and by ASA's managing director, G. F. Hussey, Jr., and its technical director, J. W. McNair. The ASTM representatives are N. L. Mochel of Westinghouse Electric, F. L. LaQue of International Nickel, and A. A. Bates of the Portland Cement Association.

The two committees are in addition to a group of technical advisory panels drawn from leading professional scientific and engineering societies to advise various technical divisions of the Bureau. These panels, whose activities are coordinated by the NAS-NRC, help to keep the Bureau informed as to the needs of the nation's scientific and technological community in the areas of their specific interest.

Radio Telescope

Plans to construct a new radio telescope, perhaps as large as 250 feet in diameter, were disclosed recently by the National Aeronautics and Space Administration to the Senate Aeronautical and Space Science Committee. A request for funds to start construction of the facility, to be located at Goldstone, Calif., was included in a tentative NASA budget drafted for the coming fiscal year. Intended as a principal station for communication with satellites and space probes, it has been proposed that the instrument be built as part of a deep-space network to include two other radio telescopes now under construction in Australia and in South Africa.