(NAIC). Frank D. Drake, presently associate director of the Center for Radiophysics and Space Research at Cornell University directs NAIC from his Cornell office. According to Drake, the restructuring is necessary so that the observatory can function more effectively as a national research center. The surface of the antenna of the Arecibo radio telescope is being upgraded at a cost of \$5 million. Tor Hagfors, formerly of Lincoln Laboratory, has been named director of Observatory operations. Thomas Gold will continue to devote a major part of his time to Arecibo as the senior science adviser. NAIC is operated under a three-year National Science Foundation contract.

## Project plans for scientific aid to state legislatures

The National Science Foundation is supporting the planning phase of a program to provide professional assistance to state legislatures, as a step towards strengthening the role of the states in science and technology.

The \$40 000 planning grant was awarded to the Citizen's Conference on State Legislature in Kansas City, Mo. The new project, which is called the Model Committees Staff Project (MCSP), will attempt to provide state decision makers with tools for sciencerelated activities. To fulfill this goal MCSP will participate in the selection of model state-legislature committee staffs and the selection of state legislatures that will participate in the program. It will also choose areas to be considered, in consulation with the selected state legislatures.

If present plans prevail, there will be federal agency support of the development and operations stage of legislative staffs with parallel interests to the federal agencies. For example, a legislative transportation committee might be supported in part by the Federal De-

partment of Transportation.

## Committee on atoms and molecules is established

The Division of Physical Sciences of the National Academy of Sciences-National Research Council has established a Committee on Atomic and Molecular Physics. The committee will complete an assessment of the field of atomic and molecular physics that was begun three years ago by the Division of Electron and Atomic Physics of the American Physical Society. It will also advise federal agencies, conduct studies of atomic and molecular physics and provide a forum for discussion. Benjamin Bederson of New York University is chairman of the committee.

## in brief

A report, Impact of Changes in Federal Science Funding Patterns on Academic Institutions (NSF-70-48). has been released by the National Science Foundation. The report. which is based on surveys conducted in 1969-70 of 104 institutions awarding the PhD in various fields of science, can be obtained for a cost of \$10.75 per copy from the Superintendent of Documents, Washington, D.C. 20402.

Publication of the Journal of College Science Teaching has been initiated by the National Science Teachers Association at 1201 16th Street, N. W. Washington, D. C. 20036. The new journal, which will be published quarterly with the first issue scheduled for October 1971, is to be edited by Leo Schubert of the American University. Subscriptions will cost \$8.00 per year for members and \$10.00 for nonmembers.

Argonne National Laboratory's 30inch bubble chamber will be transferred to the National Accelerator Laboratory in Batavia, Ill. A 15-foot bubble chamber, which is being specifically constructed for use with the Batavia accelerator, is scheduled to operate in 1972.

A one-year postdoctoral fellowship in medical physics is being offered by the Memorial Hospital for Cancer and Allied Diseases, 444 East 68th Street, New York, N. Y. 10021. For further information, contact John Laughlin of the Department of Medical Physics at the hospital.

Comments on Earth Sciences: physics will be published six times a year by Gordon and Breach. Coordinators of the journal will be Peter J. Smith of The Open University, in Buckinghamshire, UK and J. A. Jacobs of the University of Alberta. Subscriptions to individuals and libraries will be \$11.00 and \$25.00 per year, respectively.

The American Meteorological Association has announced publication of a new quarterly research journal, the Journal of Physical Oceanography. Robert O. Reid of Texas A&M University is the editor and subscriptions cost \$20.00 per year.

The Bannow Science Center was recently dedicated at Fairfield University, in Fairfield, Conn. Mathematics, physics, chemistry, biology and psychology departments as well as computer facilities are consolidated in the new center.

1971 research and development expenditures in the US are expected to reach a level of \$27 800 million in 1971, 2.7 percent of the gross national product and about 4% above the estimated 1970 support level. Additional statistics about trends in research support are contained in the report, National Patterns of R&D Resources, 1953-1971-Funds and Manpower in the United States, published by the National Science Foundation and available from the Superintendent of Documents, Washington, D. C. 20402, for a cost of \$0.50 per copy.

The National Science Foundation has released Research Development in Industry, 1968 (NSF 70-29) and Federal Funds for Research, Development and Other Scientific Activities, Fiscal Years 1969, 1970 and 1971 (NSF 70-38). Copies of these reports are available from the Superintendent of Documents, Washington, D.C. 20402. NSF 70-29 costs \$1.00 and NSF 70-38 costs \$2.00

GRAD (Graduate Resume Accumulation and Distribution) has been instituted in an attempt to place engineers and scientists in suitable positions. Information can be obtained from Engineers Joint Council, 345 East 47 Street, New York, N.Y. 10017.

Four new journals have been announced by Gordon and Breach, New York. International Journal of Magnetism. edited by Arthur J. Freeman (Northwestern) will cover both theoretical and experimental aspects of magnetism. Ferroelectrics, edited by I. Lefkowitz (Pitman Dunn Research Laboratories, Philadelphia) and G. Taylor (RCA Laboratories. Princeton), will cover theoretical and experimental work in ferroelectricity and related fields. The Interna-tional Journal of Environmental Studies, edited by J. Rose (Blackburn College of Design and Technology, UK), will be devoted to pollution problems and solutions. Geophysical Fluid Dynamics, edited by A. R. Robinson (Harvard) will deal with mechanics of atmospheres and oceans.

The ERIC Information Analysis Center for Science and Mathematics Education, 1460 West Lane Avenue, Columbus, Ohio, 43210, has established a program to acquire, analyze and disseminate literature related to environmental education. For information contact Robert E. Roth at ERIC.

NSF has given a \$113 150 grant to the University of Iowa, which will attempt to upgrade secondary-school science education by identifying promising high-school seniors, recruiting them for science teaching careers and guiding their careers. Robert E. Yager is director.