

weather, long-range navigational system for surface vehicles and aircraft.

Loftus E. Becker also addressed the committee. In describing "the initial thinking" of this government on the program for the subcommittee on legal problems of outer space, he stressed that it was "desirable to make explicit the essential understanding that the application of the U.N. Charter and the Statute of the International Court of Justice is not limited to the confines of the earth; these instruments are applicable to the relations of earthly states in outer space as well." He pointed out that the mandate given by the General Assembly to the committee was that "of constructing a rationally ordered framework within which are posed a series of questions calling for legal examination and investigation." The committee was thus not called upon to formulate immediate answers to these questions or to "study in depth" these legal questions with a view to proposing definite rules.

An "ordered catalogue of necessary legal questions," not the determination of substantive rules, was the task before the Legal Subcommittee, in his view. An effort to agree now on any comprehensive code, he believed, might "come to naught, yield a small set of maxims of extreme generality, or produce an unworkable regime which would be dangerous in its giving of a temporary illusion of certainty."

Most of the representatives at the meeting made a special point of mentioning their regret at the absence of the five delegations that had boycotted the session and expressed the hope that they would reconsider their decision. As leader of this group, the U.S.S.R. has said that the boycott will continue until the committee is reorganized so that the total number of Soviet-bloc and neutralist delegates equals the number of Western members. No definite action on any aspect of the outer space problem can be taken without the agreement of the nations that lead in space research.

Nuclear Development Agency

A compact providing for the establishment of a nuclear development agency to operate in 15 southern states of the U.S. has been approved by representatives of the states involved. Under the pact, an interstate agency would promote greater use of atomic energy in the South's industry, science, and agriculture.

The agency, which was proposed last October at the Southern Governors Conference, may eventually operate its own research installation for the benefit of the member states. In addition to the

general promotional aim, the proposed agency would collect and disseminate information about civilian uses of atomic energy, conduct training programs, study health and safety standards, and act as a licensee of the federal government in the matter of conducting research activity.

The pact now goes to the conference's nuclear committee. It must also be approved by Congress and by the legislatures of the participating states. These are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Rockefeller Institute Establishes \$10,000 Foreign Fellowships

The Rockefeller Institute has announced that four distinguished research fellowships will be awarded each year to young scientists in England, France, Denmark, and Sweden for study and investigation at the institute. The fellows will be appointed by the Royal Society of London, the French Academy of Sciences, the Royal Danish Academy of Sciences and Letters, and the Swedish Royal Academy of Sciences. Each fellow, who will carry the designation of his sponsoring society, will receive an annual stipend of \$10,000, with an additional \$1000 for travel in this country.

The new fellowships will be supported by income from a bequest to the institute of approximately \$1 million from the estate of the late Sophie D. Fricke of New York, who died on 1 March 1958. Miss Fricke was born in Jersey City, but lived most of her life in New York, where she was confidential secretary to many prominent business executives. Through wise investment of her personal savings she amassed a fortune, which she left for the furtherance of human welfare through support of science. The trustees of the institute have authorized use of the income from the Fricke fund for the triple purposes of fostering international understanding, training scientists of exceptional promise, and supporting significant research. The first Sophie Fricke fellows appointed by the foreign academies will begin their work at the institute this coming autumn.

Program on Weather Modification

A program of research in weather modification was announced last month by the National Science Foundation. It consists of 13 grants for laboratory research, field experiments, evaluation of present theory and practices, and con-

ferences on modern meteorological methods directed toward weather modification. The program has the objective of studying more intensively than has been attempted before the scientific basis of weather modification, through support of competent scientists working in cloud physics, atmospheric physics, and allied fields.

In the laboratory, freezing nuclei will be examined with the electron microscope to determine their nature and make-up. Tests will be made to find the most efficient freezing nuclei. In the field, numerous cloud-seeding experiments are planned, in which silver iodide and other agents will be used to find out more about how clouds form and grow, about the precipitation mechanism, and about variations in precipitation that may be attributed to cloud-seeding. Other means of modifying clouds and weather will be studied, including introduction of layers of lampblack and other heat-absorbing agents to change artificially the radiation balance of clouds, and inducing local changes in atmospheric electricity with probable resultant changes in the growth of cloud droplets and precipitation.

The program also includes study and improvement of the physical and statistical evaluation methods employed in determining the results of any seeding operation. Perhaps the greatest difficulty in this field is to differentiate clearly between man-caused rainfall and the rainfall that would have occurred if man had not intervened.

AAAS and Westinghouse Form Awards Managing Committee

The composition of the Science Writing Awards Managing Committee for the new AAAS-Westinghouse Science Writing Awards is now complete. The Westinghouse Electric Corporation has named Charles N. Fry, director of public relations, and Harry R. Gail, manager of research and development information in the public relations department, as its members; the National Association of Science Writers has named Jules Billard, an associate editor of *U.S. News and World Report*, and Nate Haseltine, science writer for the *Washington Post and Times Herald*; and the American Association for the Advancement of Science has named its executive officer, Dael Wolffe, and Hans Nussbaum, business manager.

In a meeting held on 3 March, it was also agreed that the AAAS would designate an administrator of the award competition, who will also serve as chairman of the managing committee. Graham DuShane, editor of *Science*, has agreed to accept this responsibility.