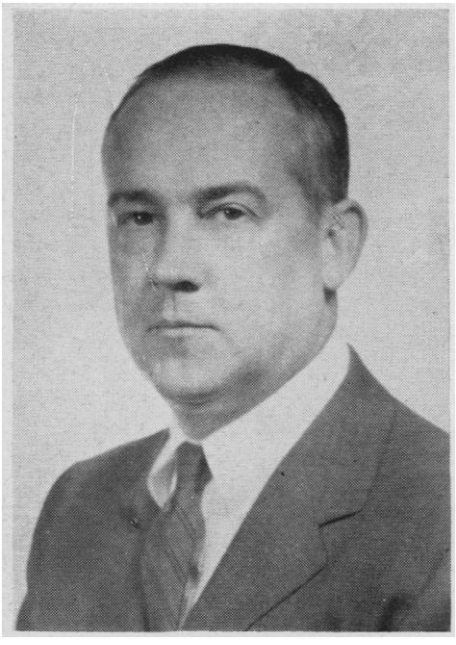


William Viall

for a state department of education (New Hampshire), and as summer lecturer at a number of universities.

Objectives

It is hoped that the new study will provide a basis for establishing state and national standards of teacher certification and for promulgating reciprocity agreements among the states. At present such reciprocity exists only at the elementary-school level, where it is possible because there is a nationally accepted program for the education of elementary teachers.

However, there is not a single reciprocity agreement, even between two states, on any certification at the secondary-school level. This has been a major concern of the National Association of State Directors of Teacher Education and Certification.

The members of the association have concluded that to be most effective the study should be concentrated on a specified field. It was decided that the area of greatest need at the present time is that of science and mathematics.

Operation

The study will be conducted on a state, regional, and national basis. Initially, five regional groups will carry out status studies. The groups will all examine much the same type of material, then each will draft what it conceives to be an ideal program. To accomplish this, they will review current certification programs, special attention being given to those which are judged to be superior; the several statements that have already been prepared as a result of special state surveys; and the recommendations of curriculum groups and other appropriate bodies, such as the AAAS Cooperative Committee on the Teaching of Science and Mathematics.

In each state a committee of scientists, teachers, and professional education administrators will be appointed to serve under the director of teacher education and certification. These state groups will consider the results of the status studies and draw up a minimum training program for science and mathematics teachers that is in keeping with the conditions in their particular state. This program will be submitted to state authorities for tentative approval, with the understanding that further study is to be carried out by the National Association of State Directors of Teacher Education and Certification for the purpose of making a proposal at the national level.

The status studies are expected to take 9 months, and the state action, another 9 months. At the end of the 18-month period, a national conference will be held to examine the findings, to focus public attention on the work, to lay plans for the development of reciprocity agreements on a national basis, and to inaugurate studies in other disciplines.

While the members of the National Association of State Directors of Teacher Education and Certification are principally responsible for administration of certification requirements, they provide active leadership in the determination of these requirements in the various states. Through this AAAS-Carnegie study, it is hoped that the group may be able to establish a new framework for certification of teachers in the public schools.

Hesitancy of Europe To Invest in U.S. International Atom Program To Be Studied

The hesitancy of European investors to participate in the U.S.-sponsored Euratom program has led to a call by the Joint Congressional Atomic Energy Committee for a full study of the United States' international program for the development of atomic energy. In announcing the new study, Senator Clinton P. Anderson (D-N.M.), chairman of the committee, named Robert M. McKinney, a former U.S. representative with the International Atomic Energy Agency, to be its director. "The time is appropriate," the senator said, "for a reappraisal of our various international atomic energy programs and policies in terms of whether they are fulfilling their original purposes and premises, and, if not, what changes are necessary or desirable."

The study planned by the committee will include examination of the bilateral agreements of the U.S. that bear on the development of atomic energy, the work of the International Atomic Energy Agency, and the U.S.-Euratom relationship. Among the particular points to be examined by the study will be these: In industrial countries, should emphasis be placed, at this stage, upon broad-scale research, development, and demonstration programs or upon the construction and operation of commercial plants? Is sufficient attention being given to the special problems of less developed countries? What are the implications of the present international policies of the United States for our domestic atomic-equipment industry, and what impact will developments abroad have upon our domestic atomic power programs?

European Program Faltering

Behind the study is the fact that only two European utilities have submitted firm plans for the construction of atomic power plants with U.S. technical and financial aid. The deadline for such proposals was 20 October. Earlier in the year five letters of intention were received at the Brussels headquarters of Euratom, but these were only for the information of officials and did not commit the utilities to build plants. This response was disappointing to U.S. and Euratom officials, who had hoped that six or more plants would be constructed under the program. However, an increase in fuel reserves from known sources and the discovery of new reserves within the earth have made the energy problem in Europe less pressing than it was at the time Euratom was conceived.

McKinney has recently evaluated this situation in Europe during tours of atomic installations and while attending the meetings of the International Atomic Energy Agency. In addition to his past work with the IAEA, McKin-

ney served as a U.S. delegate to the second Atoms for Peace conference in Geneva and as chairman of a panel that reported to Congress in 1956 on the impact of the peaceful uses of atomic energy. His published statements over the past 10 years indicate that his views on the role of atomic energy have changed with changing conditions. In the 1956 report to Congress, McKinney stressed the need for a program which would use atomic energy to meet the power requirements of other countries. However, as fuel reserves built up, particularly in Europe, he altered his views on the role of atomic energy. Speaking before Congress in May of this year, he said: "We need to rethink from scratch the way in which the United States employs the peaceful uses of atomic energy as instruments of international relations . . . We must face the fact that Europe's economic needs for nuclear kilowatts have receded."

Cooperation Assured

The study, which is now getting under way, is expected to occupy McKinney and his staff until June of next year. Assurance has been given by both the Atomic Energy Commission and the State Department of their cooperation. Chairman McCone of the AEC has assigned a number of members of his staff, including John Hall, assistant general manager for international activities, to work with the Congressional group. A similar assignment of personnel has been made by the State Department.

In the light of the faltering of the Euratom program and of McKinney's past statements, there is reason to believe that the study of this country's international atomic energy programs may result in a recommendation for a basic shift in policy away from emphasis on reactor construction toward a new emphasis on research and development. Certainly both the trend of thinking among the members of the Joint Congressional Committee on Atomic Energy and developments in Europe support this expectation. Whatever the final recommendations may be, the study, which is the first to be made since the broad outlines of U.S. policy on international atomic energy programs were laid down 5 years ago, and the selection of McKinney to direct it, seem to promise a full and necessary review of the many facets of this country's "atoms for peace" program.

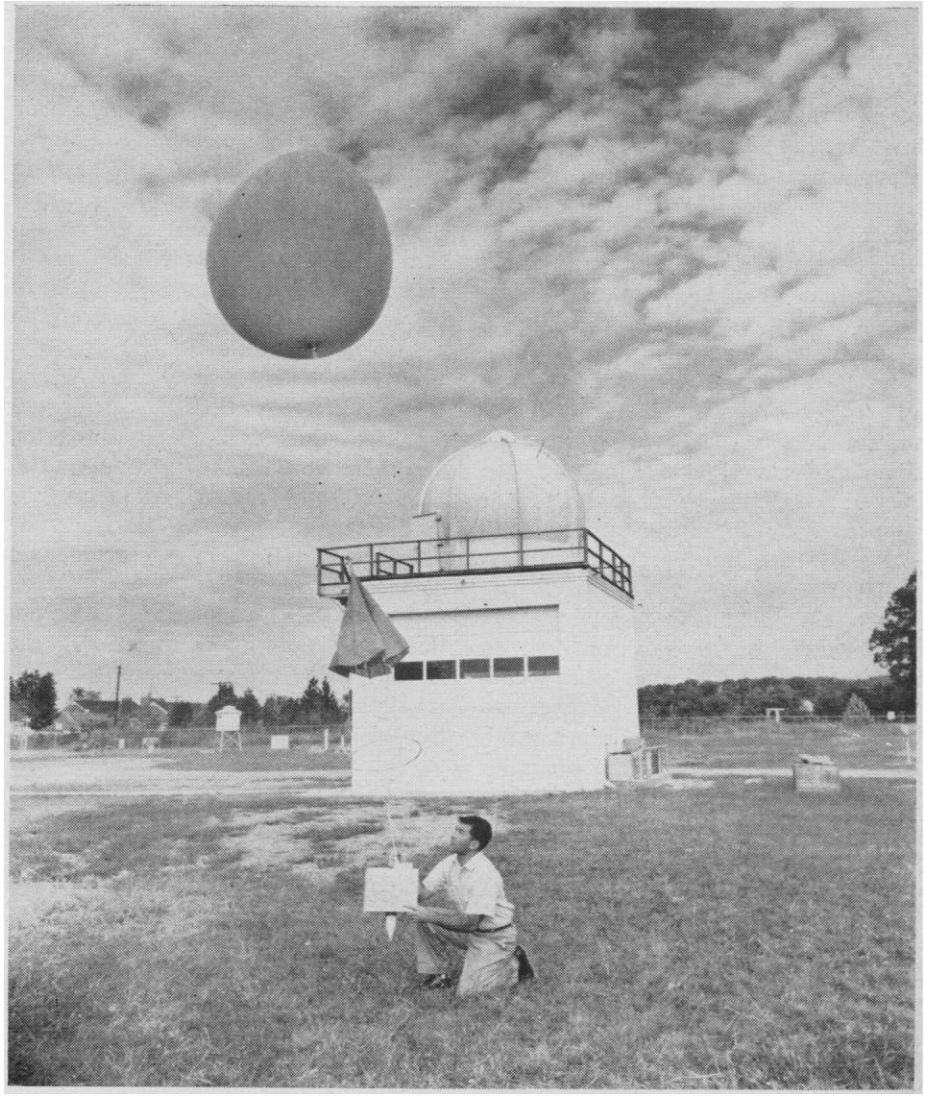
U.S. To Launch 10 Rockets in Week as Part of IGY Successor Program

Ten research rockets will be launched as the United States contribution to International Rocket Week, 16–22 November. The rocket series is part of the U.S. program for International Geophysical Cooperation–1959 (IGC–59), the continuation of the International Geophysical Year program of 1957–58. Responsibility for this country's activities in IGC–59 lies with the National Academy of Sciences' IGY Committee, which is headed by Hugh Odishaw.

The U.S. program for the rocket week is being coordinated internationally by the Committee on Space Research (COSPAR) of the International Council of Scientific Unions.

The National Aeronautics and Space Administration will launch two rockets from Wallops Island, Va. One Nike-Asp will measure upper-atmosphere winds at heights to 150 miles; a second will investigate solar x-ray and Lyman-alpha emissions.

The Army Ballistic Research Laboratories plan to send up two Nike-Cajun rockets from Fort Churchill—in cooperation with Canadian scientists and the Government of Canada—and two specially assembled five-stage rockets from Wallops Island. The shots in Canada will be used to determine water-vapor content of the atmosphere from 18 to 60 miles up, while those at Wallops Island will measure charge densities at between 50 and 1000 miles. The latter altitude range includes the ionosphere, the charge density of which



The U.S. Weather Bureau collects data for International Geophysical Cooperation–1959. Here a bureau observer holds an airborne rawinsonde assembly, consisting of a balloon, parachute, and rawinsonde transmitter. The Fiberglas dome in the background houses the rawinsonde receiver.