News of Science

U.S. Geological Survey, 1956

The Department of the Interior Appropriation Act for fiscal year 1956 has provided the Geological Survey with $26.35 million for conducting its activities in geology, topographic mapping, water resources investigations, and the supervision of mineral leasing. During the year many new projects will be initiated in each of the four operating divisions. Funds have also been provided with which to draw up plans and specifications for a new headquarters building to consolidate Survey activities in the Washington area that are now scattered at 16 different locations. It is expected that the new building will be constructed by private industry for Government use on a "lease-purchase" basis.

The major effort of the Geologic Division in 1956 will be directed toward new geologic mapping and investigations of both potential and producing mineral and mineral-fuels areas and toward the development of new methods and equipment needed to search for additional sources of mineral raw materials. A new cooperative program is planned with the State of Connecticut. It will complete the geologic mapping of that state on 7½-minute quadrangles. Cooperative projects already underway in several states will continue. In Nevada, the existing cooperative geologic mapping program is being expanded; and in Puerto Rico operations are being enlarged in order to complete the geologic mapping of the island in approximately 5 years. Survey geologists are also cooperating with the Arizona Bureau of Mines in a plan to revise that state's geologic map. Preliminary work on this project was started by the state in 1954. Other new investigations to be undertaken by the Geologic Division include studies of coking coal in New Mexico, bituminous coal in Pennsylvania, clay in Kentucky, and iron in Wisconsin.

In Pakistan, Thailand, and Indonesia the survey is establishing geologic field parties to plan a program of mapping in mineral areas. This work will be under the auspices of the International Cooperation Administration. Similar projects will continue in the Far East, the Near East, Africa, and Latin America. In addition, representatives of the Geological Survey will act as advisers to local geological surveys and government officials and assist in mapping programs.

Operations of the Conservation Division in mineral land classification, oil and gas leasing, water and power investigations, and mining leases are steadily increasing; the rising work load trend is expected to continue for many years.

In the Water Resources Division $7.15 million was appropriated for technical investigations. Of this amount $4.35 million is earmarked to match state offerings. Under this appropriation the largest cooperative water-resources program in the history of the survey will be in progress. The current drouth over wide areas of the West and Southwest and the need for larger water supplies to meet expanding use in many areas are cited as major reasons for increased interest by the states in the federal program.

Congress appropriated $11.32 million for the Topographic Division in fiscal year 1956. This amount includes $1.02 million that is to be used for matching funds that the various states and local governments are expected to appropriate as their voluntary contribution to speed up mapping projects in which they have a special interest. In such programs the state and local governments contribute half the cost, including costs for personnel and equipment. Twenty-eight states have indicated their desire for this type of cooperation this year.

State mapping advisory committees have been organized by 17 states to study the mapping needs within their borders in order to submit coordinated expressions of map requirements to assist the survey in its program. A probable long-range saving of about 25 percent in the cost of preparing map manuscripts for printing is expected from the new technique of scribing or "engraving" map data on special, film-coated negatives, instead of working with pen and ink on paper. New techniques, special instruments, and precise optical equipment developed by survey engineers over the years have resulted in a steady increase in the amount of mapping that can be turned out each month without substantial increase in personnel. More than 1,500 new or revised quadrangles, covering about 140,000 square miles of United States territory, will be produced in the current fiscal year. Distribution figures indicate that the public will buy approximately 3.5 million maps during the 12-month period, a continuation of the rapid increase in map use that has taken place in recent years.

Complete mapping of the Brooks Range area in Alaska is involved in the new series of 1: 250,000-scale territorial maps being prepared to replace the provisional series. This new series is scheduled for completion about 1962.

News Briefs

■ Joseph Kaplan, chairman of the U.S. National Committee for the International Geophysical Year (USNC–IGY) and former chairman of the department of physics at the University of California at Los Angeles, has announced that the secretariat of the committee now includes the following: executive secretary, Hugh Odishaw, former assistant to the director of the National Bureau of Standards; administrative officer, R. C. Peavey, formerly administrative head of the NBS Central Radio Propagation Laboratory; and program officer, G. F. Schilling, since 1949 a member of the Institute of Geophysics at the University of California, Los Angeles.

The United States program for the IGY, 1957–58, includes the following fields: aurora and airglow, cosmic rays, geomagnetism, glaciology, gravity measurements, ionospheric physics, latitude and longitude, meteorology, oceanography, seismology, solar activity, rocket exploration of the upper atmosphere, and the earth satellite program [*Science* **122**, 322 (19 Aug. 1955)].

The planning for this country's program by the U.S. National Committee has been achieved through the assistance of 14 technical subcommittees and panels. These groups have worked closely with the USNC Secretariat and with many public and private institutions that are cooperating in the US–IGY effort. The U.S. National Committee for the IGY, established by the National Academy of Sciences, is responsible for the formulation, direction, and execution of the U.S. program. Federal sponsorship and funds have been obtained through the National Science Foundation. To date, the Congress has appropriated $12 million for this country's participation in the IGY.

■ Great Britain will stage the third of a series of atomic weapons tests in Australia next April. Under the direction of C. A. Adams, chief of research at the atomic weapons research establishment at Aldermaston, the tests will be held in