evaluating the mineral resource potential of an area, or gaining geologic knowledge to aid land development for engineering use. The following partial list of the Survey's new field projects serves to give some idea of the scope and purposes of current field investigations: Mississippi Embayment, western Tennessee—a study of water-bearing formations that are important sources of ground water; Barter Island and Mount Chamberlain areas, Alaska—a study of the effects of Arctic conditions on engineering construction, and of understanding the geology of the Arctic; barite resources of west-central Arkansas; porphyry copper deposits of the western United States; Salinas Valley, Calif.—a study of the oil and gas potential; coal resources of Washington; Sierra Nevada batholith, California—a study of the granite rocks and associated mineral deposits of this great mountain range; T-3 Ice Island, Arctic Ocean—electrical and seismic studies that are expected to provide new information on the nature and configuration of the material beneath the Arctic Ocean.

Nuclear Explosions and Isotopes from Power

The Atomic Energy Commission is undertaking studies to determine the practicability of producing both power and radioisotopes from nuclear explosions. As a first step in the studies, consideration is being given to the detonation of a small device underground in the salt-bed area known as the Solado formation in the Delaware Basin, Eddy County, New Mexico, about 25 miles southeast of Carlsbad.

The project, if carried out, would be conducted in the summer of 1959 in a 1200-foot shaft drilled into the salt beds so that heat developed by the nuclear explosion would be confined to a relatively small area. Neutrons created in the nuclear reaction would be used to produce radioisotopes. General scientific information on scaling laws, seismic effects, and geological data also would be obtained. As now planned, the yield of the explosion would be about 10 kilotons, the equivalent of 10,000 tons of high explosive.

The technical work is being conducted by the University of California Radiation Laboratory, Livermore, and the planning is under the supervision of the commission's San Francisco Operations Office. The project manager for the demonstration is James E. Reeves of the commission's Albuquerque Operations Office, and the technical director is Gerald W. Johnson, Test Division Leader, UCRL, Livermore.

The New Mexico experiment is the second initiated under the commission's Plowshare Program to investigate important peacetime applications of nuclear explosives. As previously announced, studies are being conducted on the Alaska Coast between Cape Seppings and Point Hope to determine the practicability of excavating a harbor.

Century 21 Exposition

A world fair, emphasizing science and its relationship to the development of man, will receive the help of a group of leaders in American science.

Seventeen scientists from the academic world, industry, scientific associations, and scientific journals will go to Seattle, Washington, this month to work with exposition officials in the development of plans.

The fair, which has been in the initial planning stage since 1955, is scheduled to open in May 1961 on a 70-acre site in Seattle.

The science theme of the exposition was decided upon when officials connected with the project found that science leaders were seeking a means of putting on a fair in 1961 to give a dramatic presentation of the results of the International Geophysical Year. In addition to the IGY theme, the exposition will ask and attempt to answer the question "Where is science going during the next 100 years?"

Although the basic theme will be science, the fair, which will be called Century 21 Exposition, will also mark the centennial of the University of Washington and the admission of Alaska as a state. The commercial relationship of the city of Seattle with the nations rimming the Pacific Ocean will also be stressed by exhibitions in a Pan-Pacific section. The fair is expected to be international in character, with the Soviet Union, Italy, Japan, and other nations participating. A bill currently before the United States Congress would make the Federal Government a participator.

Maps for Disease Control

Among the scientific publications to appear in West Germany since the war is a series of atlases which trace graphically the movement of epidemic and endemic diseases throughout the world. Two volumes of this work have been published since 1945, and part 2 of volume 3 will appear shortly. Whereas volumes 1 and 2 are confined principally to Europe, North and South America, and Africa, volume 3 covers Asian countries. These atlases contain medical and scientific information on the spread and control of epidemic and endemic diseases; facts about geography, history, and climate; and population surveys.

The correlation and graphic presentation of all the factors involved in the control of contagious disease is the lifework of a group of scientists and professors in the Geomedical Research Station of the Heidelberg Academy of Sciences. The studies were begun before World War I; after 1945 the U.S. Navy interested itself in the continuation and extension of the work and volume 1 of the present series was published under Navy auspices in 1952. Volumes 2 and 3 have been published by the Heidelberg Academy and the Falk Publishing House of Hamburg.

News Briefs

A special committee of the International Geophysical Year has voted for a 1-year extension of the 18-month IGY program, originally set up to end in December 1958. The extension period would be known as the "International Geophysical Cooperation of 1959." Although the committee agreed to extend the research, it still will be necessary to get the 60 participating governments to provide financial support.

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Wallops Island, Virginia, will become the Cape Canaveral of the government's new National Aeronautics and Space Administration if present plans are approved. A $24.5-million expansion of facilities at the island has been proposed by the National Advisory Committee for Aeronautics. The island is a 3200-acre strip off the Eastern Shore where NACA has been testing rockets for 13 years.

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The first Electronic Computer Exhibition ever held in the United Kingdom will be staged in London from 28 November to 4 December. More than 40 British manufacturers are exhibiting. A symposium on the applications of computers to problems in business, industry, and science will be held with the exhibition. Also, immediately before the exhibition, 24–26 November, an associated scientific symposium on "The Mechanization of Thought Processes," organized by the National Physical Laboratory, will be held at Teddington, Middlesex, England.

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The University of Chicago has established a Graduate School of Education. Francis S. Chase, chairman of the department of education, has been appointed dean of the school. Creation of the graduate school does not replace or eliminate the existing department of education, which continues its present activities, particularly those of research and instruction for graduate students in