

Power Engineering

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ENGINEERS' PREVIEW

E. PARISH (PAT) LOVEJOY, director of Detroit Edison Company's Public Information Division, will be missed around Detroit Edison for the next year. He has been granted a year's leave of absence requested for reasons of health. Appointed to take up his duties is George H. Tuttle, an Edison man since 1927, who recently returned to the company after a six month loan assignment as a Defense Electric Power Administration consultant in Washington, D. C.

WILLIAM ROGERS HEROD has been elected a vice president of the General Electric Company and will continue as president of the International General Electric Company which he has headed since 1945.

At the same time, it was announced that the International General Electric Company, Incorporated, which has been a wholly-owned affiliate of General Electric since 1919, will, on July 31, be merged with and become a division of the General Electric Company. As a division of the parent company, the International General Electric Company will retain that name and continue to have the same responsibility for the conduct of the foreign business of the company. Herod and the other officers of the former affiliate will retain their titles and continue in the same capacities.

DONALD R. JENKINS will be manager of the newly-formed gas turbine application engineering section of the Steam Division of the Westinghouse Electric Corporation at South Philadelphia, Pa. The section was formed recently to handle all Company negotiations involving gas turbines for land and marine service.

Mr. Jenkins has been with Westinghouse since 1940, when he joined the Company's graduate student training course following his graduation from the University of Utah at Salt Lake City. He has held numerous engineering posts with the Company in Pittsburgh, Philadelphia, and Los Angeles. Since February, 1951, he has been an application engineer in the electric utility department of the Company's district office in Salt Lake City.

THE 200,000-kw generator being built by the Westinghouse Electric Corporation for the Philadelphia Electric Company will utilize inner-cooling in both its rotor and stator, it was disclosed recently. Scheduled for shipment to the Cromby station in 1954, the generator will bring the station's capacity to 350,000 kw.

Inner cooling makes use of hollow generator conductors through which the hydrogen gas is passed. Bringing the

hydrogen in direct contact with the copper conductors increases the cooling effect of the gas to such an extent that considerably less copper and steel is needed per kilowatt of generator output.

The 200,000-kw turbine-generator will be the largest single-shaft unit ever built.

A FELLOWSHIP for conducting systematic studies of standardization and its applications in science, engineering, production and marketing will be established at Mellon Institute, Pittsburgh, Pa. This Fellowship will be sustained at the Institute by a grant from the Sarah Mellon Scaife Foundation of Pittsburgh, and its projects will be organized and supervised by Dr. Dickson Reck, Advisory Fellow. Dr. Reck will work in cooperation with research specialists of the Institute and with national authorities and societies.

IRON ORE is mined beneath the sea more than two miles from shore near Bell Island, Newfoundland, according to American Iron and Steel Institute. A system of belt conveyors is being installed to help bring the ore from beneath Conception Bay to the surface on the island. The system will be able to lift 1000 tons of ore an hour from a depth of 1730 ft. According to a published report this Wabana Mine is expected to supply 2,800,000 tons of ore in 1952.

THE PHILADELPHIA ELECTRIC COMPANY recently initiated the use of a new aerial photo method to inventory "fuel on hand" in their enormous coal stockpiles. This new air survey system, used to check more than 500,000 tons of coal stored in ten different locations, obtained the inventory figures in days instead of weeks, and cut inventory costs by 25 per cent.

The survey plane flew over the stockpiles at a set altitude. Using a precise timing device on their camera, they took two pictures of each seventy-five acre section, at slightly different angles. In this way, three-dimensional views of the terrain were obtained photographically, and the contours of each coal pile were shown exactly. Special plotting equipment quickly established the cubic volume of coal in each pile.

When rechecked, this modern scientific method of aerial coal inventory, in addition to being much faster and less expensive, proved to be accurate to within 3-5 per cent.

A NEW METHOD of highly accurate analysis of various materials by means of atomic energy is now available at Oak Ridge as a service to industrial, scientific and medical groups.

Developed by scientists at Oak Ridge

National Laboratory, the technique permits detection and measurement of impurities in foods, pharmaceuticals, metals and other materials, and may help manufacturers improve the purity of their final products.

The service is offered by Carbide and Carbon Chemicals Co., a division of Union Carbide and Carbon Corp., which operates ORNL for the Atomic Energy Commission.

BATTELLE INSTITUTE, Columbus, Ohio, will have soon a new million-dollar "special purpose" laboratory building. Construction was authorized by the NPA because of the important defense research being conducted at Battelle.

Some 300 industrial firms, in addition to the Air Force, Army, Navy, and Atomic Energy Commission, are sponsoring important research studies at Battelle. Director Clyde Williams estimates that in the space provided by the new building, Battelle will be in a position to conduct an additional \$2,000,000 worth of research for defense agencies and defense industry.

The new building will be of a specially reinforced-concrete construction designed to minimize vibration because the building will be occupied by research personnel working in electronics and other fields of research where delicate measurements are essential.

THE COUNCIL for Technological Advancement will assist the Machinery and Allied Products Institute in the execution of its specialized and concentrated program in the interests of capital goods and industrial equipment producers and the public welfare. Its purpose will be to program, to pioneer, and to promote ideas for a more dynamic economy.

The Council will undertake activities in the long-range interest of technological advancement which MAPI alone cannot initiate for an indefinite period without disservice to other pressing needs. Also, it will accelerate MAPI's program by providing new centers for study and action which will place at work an additional number of alert minds through its Board of Trustees and committees.

ONE of the biggest birthday parties to be held anywhere this year — 12,000 guests in five hotels — will be the 40th annual National Safety Congress in Chicago, Oct. 20-24.

The Congress is the annual convention of members of the National Safety Council. Through the Congress emphasis will be placed on the progress that has been made in accident prevention in the four decades that have followed the first