BULLETIN BOARD

Volume 22, Number 31 Published by the BNL Public Relations Office August 1, 1968

# Atomic Pile Now On Stand-by Basis After 18-Year Use

Back in September of 1947 the headquarters of the United Nations was at Lake Success in Nassau County. Fifty miles to the east, Camp Upton was undergoing a name-change to Brookhaven National Laboratory. A writer for a popular magazine had just visited the Lab and predicted that "Ultimately the scientific staff of Brookhaven would grow from the present 90 members to a total of 200 scientists." He also predicted that Brookhaven would eventually look more like a university than an army post. "Scientists work better in that kind of setting," he said.

At Brookhaven, 800 people, mostly construction workers, were busy starting construction of an atomic pile, the first to be built for research on the peaceful uses of atomic energy. They worked on Rutherford Hill, excavating, building, and pouring concrete for the foundations of the "Pile."

In another section of the Lab, a gymnasium had been converted into a storehouse for blocks of graphite that were to form the moderator for the reactor.

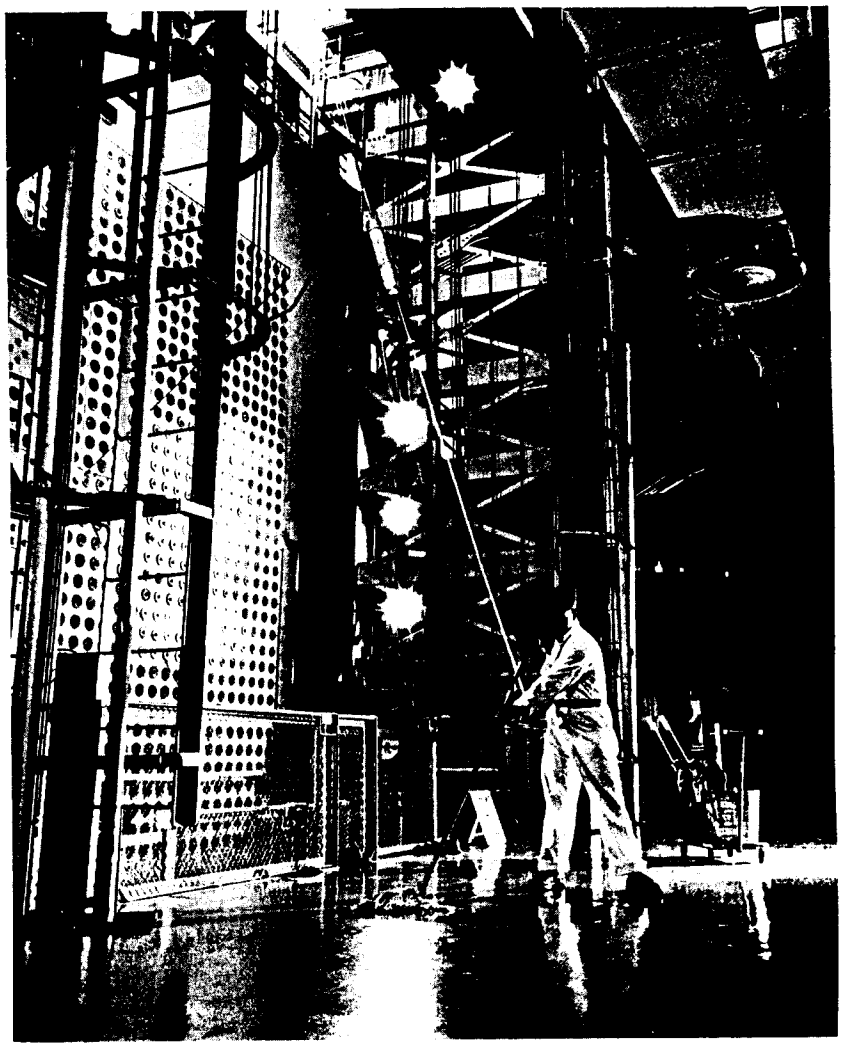
On August 22, 1950, after the completion of the buildings and loading of the fuel elements, the pile achieved criticality, and has since operated without trouble for the past eighteen years. Although it was designed for a power level of 28 megawatts, it frequently exceeded that level.

Now the UN has long been settled in a complex of skyscrapers in Manhattan. Camp Upton is remembered only by a few old-timers, and the scientific staff of Brookhaven National Laboratory has grown to over 900. Most of the army buildings have either been torn down or remodeled, but the Lab still has a long way to go before it looks like a university campus.

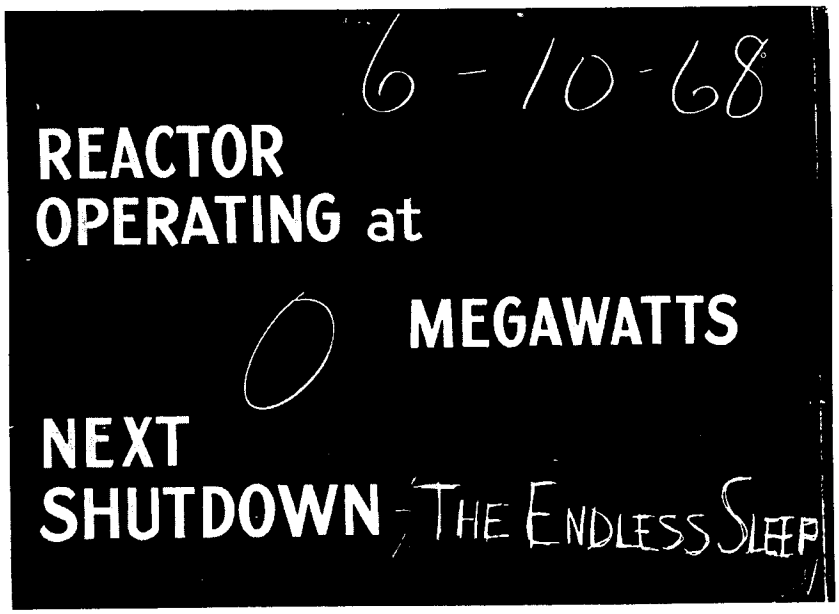
During its 18 years of operation, the accomplishments of the pile have been considerable. New methods, materials and experimental techniques have been developed in areas of physics, chemistry, biology, medicine, engineering, and training of personnel. Dating of art treasures, development of new motor oils, manufacture of radioisotopes and development of new grain crops through seed irradiations. All of these as well as the less spectacular experiments in physics and engineering have had a great effect on the present knowledge of atomic energy.

Today, more than a month after the last shut-down of the reactor, the once-bustling building is quiet. The experimental faces still have some equipment in place, but the familiar blinking of lights on instrument panels is missing. The control room is deserted, and the blackboard near the northeast corner of the pile bears this poignant message: Reactor Operating at – 0 megawatts. Next shutdown – The Endless Sleep.

## *First Peace-Time Reactor Goes On Stand-By*



**At the loading face of the BGRR, Milton Jones, Jr., of PE&P does a floor-cleaning job at the unused research facility.** **Photos by Humphrey**




**The blackboard at the Graphite Reactor tells the story.**